MACMILLAN'S MAGAZINE.

MARCH, 1863.

INTRODUCTORY LECTURE ON THE SCIENCE OF LANGUAGE,

Delivered at the ROYAL INSTITUTION, the 21st of FEBRUARY, 1863,

BY PROFESSOR MAX MÜLLER,

GENTLEMEN,-In a course of lectures which I had the honour to deliver in this Institution two years ago, I endeavoured to show that the language which we speak, and the languages that are and that have been spoken in every part of our globe since the first dawn of human life and human thought, supply materials capable of scientific treat-We can collect them, we can classify them, we can reduce them to their constituent elements, and deduce from them some of the laws that determine their origin, govern their growth, necessitate their decay; we can treat them, in fact, in exactly the same spirit in which the geologist treats his stones and petrifactions, nay, in which the botanist treats the flowers of the field, and the astronomer the stars of heaven. There is a science of language, as there is a science of the earth, of its flowers and its stars; and though, as a young science, it is very far as yet from that perfection which—thanks to the efforts of the intellectual giants of so many ages and many countries—has been reached in astronomy, botany, and even in geology, it is, perhaps, for that very reason all the more fascinating. It is a young and a growing science, that puts forth new strength with every year, that opens new prospects, new fields of enterprise on every side, and rewards its students with richer har-

vests than could be expected from the exhausted soil of the older sciences. The whole world is open, as it were, to the student of language. There is virgin soil close to our door, and there are whole continents still to conquer if we step beyond the frontiers of the ancient seats of civilization. We may select a small village in our neighbourhood to pick up dialectic varieties and to collect phrases, proverbs, and stories which will disclose fragments—almost ground to dust, it is true, yet unmistakable fragments-of the earliest formations of Saxon speech and Saxon thought. Or we may proceed to our very antipodes to study the idiom of the Hawaian islanders, and watch in the laws and edicts of Kaméhaméha the working of the same human faculty of speech, in its most primitive efforts, and yet with its never-failing triumphs. The classical dialects of Ancient Greece, ransacked as they have been by classical scholars, such as Maittaire, Giese, and Ahrens, will amply reward a fresh battue of the comparative philologists. Their forms, which to the classical scholar were mere anomalies and curiosities, will then assume a different aspect. They will range themselves under more general laws; and, after receiving light by a comparison with other dialects, they will, in turn, reflect that light with increased power on the phonetic peculiarities of Sanskrit

No. 41 .- vol. vii.

and Prákrit, Zend and Persian, Latin and French. But, even were the old mines exhausted, the science of language would create its own materials, and, as with the rod of the prophet, smite the rocks of the desert to call forth from them new streams of living speech. The rock inscriptions of Persia show what can be achieved by our science. I do not wonder that the discoveries due to the genius and the persevering industry of Grotefend, Burnouf, Lassen, and last, not least, of Rawlinson, should seem incredible to those who only glance at them from a distance. Their incredulity will hereafter prove the greatest compliment that could have been paid to these eminent scholars. What we now call the Cuneiform inscriptions of Cyrus, Darius, Xerxes, Artaxerxes I., Darius II., Artaxerxes Mnemon, Artaxerxes Ochus (of which we have several editions, translations, grammars, and dictionaries), was originally a mere conglomerate of wedges, engraved or impressed on the solitary monument of Cyrus in the Murghab, on the ruins of Persepolis, or the rocks of Behistún, near the frontiers of Media, and the precipice of Van, in Armenia. When Grotefend attempted to decipher them, he had first to prove that these scrolls were really inscriptions, and not mere Arabesques or fanciful ornaments. He had then to find out whether these magical characters were to be read horizontally or perpendicularly, from right to left, or from left to right. Lichtenberg maintained that they must be read in the same direction as Hebrew. Grotefend, in 1802, proved that the letters followed each other, as in Greek, from left to right. Even before Grotefend, Münter and Tychsen had observed that there was a sign to separate the words. This is of course an immense help in all attempts at deciphering inscriptions, for it lays bare at once the terminations of hundreds of words, and, in an Aryan language, supplies us with the skeleton of its grammar. Yet consider the difficulties that had still to be overcome before a single line could be read. It was unknown in what language these

inscriptions were composed; it might have been a Semitic, a Turanian, or an Aryan language. It was unknown to what period they belonged, and whether they commemorated the conquests of Cyrus, Darius, Alexander, or Sapor. It was unknown whether the alphabet used was phonetic, syllabic, or hieroglyphic. It would detain us too long were I to relate how all these difficulties were removed one after the other; how the proper names of Darius, Xerxes, Hystaspes, and of their god Ormusd, were traced; how from them the values of certain letters were determined; how with an imperfect alphabet other words were deciphered which clearly established the fact that the language of these inscriptions was Ancient Persian; how then, with the help of the Zend, which represents the Persian language previous to Darius, and, with the help of the later Persian, a most effective cross fire was opened; how even more powerful ordnance was brought up from the Arsenal of the ancient Sanskrit; how outpost after outpost was driven in, a practical breach effected, till at last the fortress had to surrender and submit to the terms dictated by the Science of Language.

I should gladly on some future occasion give you a more detailed account of this glorious siege and victory. At present I only refer to it to show how, in all quarters of the globe, and from sources where it would least be expected, new materials are forthcoming that would give employment to a much larger class of labourers than the Science of Language can as yet boast of. The inscriptions of Babylon and Nineveh, the hieroglyphics of Egypt, the records in the caves of India, on the monuments of Lycia, on the tombs of Etruria, and on the broken tablets of Umbria and Samnium, all these wait to have their spell broken by the student of language. If, then, we turn our eyes again to the yet unnumbered dialects now spoken by the nomad tribes of Asia, of Africa, of America, and of the islands of the Pacific, no scholar need be afraid for some generations to come

that there will be no language left to

him to conquer.

There is another charm peculiar to the Science of Language, or one, at least, which it shares only with its younger sisters: I mean, the vigorous contest that is still carried on between great opposing principles. In Astronomy, the fundamental laws of the universe are no longer contested, and the Ptolemæan system is not likely to find new supporters. In Geology, the feuds between the Vulcanists and Neptunists have come to an end, and no unprejudiced person doubts at the present moment whether an Ammonite be a work of nature, or a flinthead a work of art. is different in the Science of Language. There, the controversies about the great problems have not yet subsided. The questions whether language is a work of nature or a work of art, whether languages had one or many beginnings, whether they can be classified in families or not, are constantly starting up, and scholars, even while engaged in the most minute inquiries, must always be prepared to meet the enemy. This, no doubt, may sometimes be tedious, but it has this good effect: it leads us to examine carefully the ground on which we take our stand, and keeps us alive, even while analysing mere prefixes and suffixes, to the grandeur and the sacredness of the issues that depend on these minutiæ. The foundations of our science do not suffer from such attacks ;-on the contrary, like the coral cells built up quietly and patiently from the bottom of the sea, they become more strongly cemented by the whiffs of spray that are dashed across.

Emboldened by the indulgent reception with which I met in this place, when first claiming some share of public sympathy in behalf of the Science of Language, I venture to-day to come again before you with a course of lectures on the same subject—on mere words, on nouns, and verbs, and particles—and I trust you will again, as you did then, make allowance for the inevitable shortcomings of one who has to address you with a foreign accent,

and on a subject foreign to the pursuits of many of the supporters of this Institution. One thing I feel more strongly than ever-namely, that without the Science of Language, the circle of the physical sciences, to which this Intitution is more specially dedicated, would be incomplete. The whole natural creation tends towards man: without man, nature would be incomplete and purposeless. The Science of Man, therefore, must form the crown of all the natural sciences. And, if it is language by which man differs from all other created things, the Science of language has a right to hold that place which I claimed for it when addressing for the first time the members and supporters of this Institution. Allow me to quote the words of one whose memory becomes more dear and sacred to me with every year, and to whose friendship I owe more than I could here say. Bunsen, when addressing, in 1847, the newly-formed section of Ethnology at the meeting of the British Association at Oxford, said :-

"If man is the apex of the creation, " it seems right, on the one side, that a "historical inquiry into his origin and " development should never be allowed " to sever itself from the general body " of natural science, and in particular " from physiology. But, on the other "hand, if man is the apex of the "creation, if he is the end to which " all organic formations tend from the "very beginning; if man is at once "the mystery and the key of natural " science; if that is the only view of " natural science worthy of our age-" then ethnological philology, once esta-"blished on principles as clear as the physiological are, is the highest branch of that science for the advancement of which this Association is instituted. "It is not an appendix to physiology " or to anything else; but its object is, on the contrary, capable of becoming "the end and goal of the labours and " transactions of a scientific association." -Report of the British Association for the Advancement of Science, 1847, p. 257.

In my former course all that I could attempt to do was to point out the principal objects of the Science of Language. to determine its limits, and to lay before you a general map of the ground that had been explored with more or less success during the last fifty years. That map was necessarily incomplete. comprehended not much more than what in an atlas of the ancient world is called "Orbis Veteribus Notus," where you distinguish names and boundaries only in those parts of Europe, Asia, and Africa which formed the primeval stage of the great drama of history; but where, beyond the Hyperboreans in the North, the Anthropophagi in the West, and the Ethiopians in the South, you see but vaguely shaded outlines - the New World beyond the Atlantic existing as yet only as the dream of philosophers.

It was at first my intention, in the present course of lectures, to fill out, in greater detail, the outlines of that map. Materials for this are abundant and steadily increasing. The works of Hervas, Adelung, Klaproth, Balbi, Prichard, and Latham, will show you how much more minutely the map of languages might be coloured at present than the ancient geographical maps of Strabo and Ptolemy. But I very soon perceived that this would hardly have been a fit subject for a course of lectures. I could only have given you an account of the work done by others : of explorations made by travellers or missionaries among the black races of Africa, the yellow tribes of Polynesia, and the red-skins of America. I should have had simply to copy their descriptions of the manners, customs, laws, and religions of these savage tribes, to make abstracts of their grammars and extracts from their vocabularies. This would necessarily have been work at second-hand, and all I could have added of my own would have been to criticize their attempts at classifying some of the clusters of languages in those distant regions, to point out similarities which they might have overlooked, or to protest against some of the theories which they had propounded without sufficient evidence. All who have had to examine the accounts of new languages, or families of languages, published by missionaries or travellers, are aware how not only their theories, but their facts, have to be sifted, before they can be allowed to occupy even a temporary place in our handbooks, or before we should feel justified in rectifying accordingly the frontiers on the great map of the languages of mankind. Thus I received but the other day some papers. printed at Honolulu, propounding the theory "that all those tongues which "we designate as the Indo-European lan-"guages have their true root and origin "in the Polynesian language." "I am "certain," the author writes, "that this "is the case as regards the Greek and "Sanskrit; I find reason to believe it "to be so as to the Latin and other "more modern tongues-in short, as . "to all European languages, old and "young." And he proceeds: "The "second discovery which I believe "I have made, and with which the "former is connected, is that the study "of the Polynesian language gives us "the key to the original function of "language itself, and to its whole " mechanism."

Strange as it may sound to hear the language of Homer and Ennius spoken of as an offshoot of the Sandwich Islands, mere ridicule would be a very inappropriate and very inefficient answer to such a theory. It is not very long ago that all the Greek and Latin scholars of Europe shook their heads at the idea of tracing the roots of the classical idioms back to Sanskrit, and even at the present moment there are still many persons who cannot realize the fact that, at a very remote, but a very real period in the history of the world, the ancestors of the Homeric poets and of the poets of the Veda must have lived together as members of one and the same race, as speakers of one and the same language. There are other theories not less startling than that which would make the Polynesian the primitive language of mankind. I received lately a Comparative Grammar of the South African Languages, printed at the Cape,

Oct. 7, Oct. 11, 1862.—Essay by Dr. J. Rae.

written by a most learned, accurate, and ingenious scholar, Dr. Bleek.1 In it he proves that, with the exception of the Bushman tongue, which has not yet been sufficiently studied, the great mass of African languages is to be reduced to two families. He shows that the Hottentot is a branch of the North African class of languages,2 and that it was separated from its relatives by the intrusion of the second great family, the Kafir languages, which occupy (as far as our knowledge goes) the whole remaining portion of the South African continent, extending on the eastern side from the Keiskamma to the equator, and on the western side from 32° southern to about 8° northern latitude. But the same author claims likewise (page 2) a very prominent place for the African idioms, in the general history of human speech. "perhaps, not too much to say," he writes, (page viii. Preface) "that similar " results may at present be expected from "a deeper study of such primitive forms "of language as the Kafir and the Hot-"tentot exhibit, as followed, at the "beginning of this century, the dis-"covery of Sanskrit, and the compara-"tive researches of Oriental scholars. "The origin of the grammatical forms, "of gender and number, the etymology "of pronouns, and many other questions " of the highest interest to the philologist, "find their true solution in Southern "Africa."

But, while we are thus told by some scholars that we must look to Polynesia and South Africa, if we would find the clue to the mysteries of Aryan speech, we are warned by others that there is no such thing as an Aryan or Indo-Euro-

¹ A Comparative Grammar of the South African Languages, by W. H. T. Bleek, Ph.D., 1862

"" Since the Hottentot race is known only as a receding one, and traces of its existence extend into the interior of South Africa, it may be looked upon as a fragment of the old and properly Ethiopic population, stretched along the mountain-spine of Africa, through the regions now occupied by the Galla; but cut through and now enveloped by tribes of a different stock."—T. C. Adamson, in Journal of the American Oriental Soc., vol. iv., p. 449. 1859.

pean family of languages, that Sanskrit has no relationship with Greek, and that comparative philology is but a dream of continental professors. How are theories and counter-theories of this kind to be treated? However startling and paradoxical in appearance, they must be examined before we can either accept or reject them. "Science," as Bunsen³ said, "excludes no suppositions, how-"ever strange they may appear, which "are not in themselves absurd-viz., "demonstrably contradictory to its own "principles." But by what tests and rules are they to be examined? They can only be examined by those tests and rules which the science of language has established in its more limited areas of research. "We must " begin," as Leibnitz said, "with study-"ing the modern languages which are "within our reach, in order to compare "them with one another, to discover "their differences and affinities, and "then to proceed to those which have "preceded them in former ages; in order "to show their filiation and their origin, "and then to ascend step by step to the "most ancient of tongues, the analysis of "which must lead us to the only trust-"worthy conclusions." The principles of comparative philology must rest on the evidence of the best known and the best analysed dialects, and it is to them that we must look, if we wish for a compass to guide us through the most violent storms and hurricanes of philological speculation.

I thought it best, therefore, to devote the present course of lectures to the examination of a very limited area of speech—to English, French, German, Latin, and Greek, and, of course, to Sanskrit—in order to discover or to establish more firmly some of the fundamental principles of the Science of Language. I believe there is no science from which we, the students of language, may learn more than from Geology. Now in Geology, if we have once acquired a general knowledge of the successive strata that form the crust of the earth, and of the faunas and floras pre-

³ L. c. p. 256.

sent or absent in each, nothing is so instructive as the minute exploration of a quarry close at hand, of a cave or a mine, in order to see things with our own eyes, to handle them, and to learn how every pebble that we pick up points a lesson of the widest range. I believe it is the same in the Science of Language. One word, however common, of our own dialect, if well examined and analysed, will teach us more than the most ingenious speculations on the nature of speech and the origin of roots. We may accept it, I believe, as a general principle, that what is real in modern formations, is possible in more ancient formations; that what has been found to be true on a small scale, may be true on a larger scale. Principles like these, which underlie the study of Geology, are equally applicable to the study of Philology, though in their application they require, no doubt, the same circumspectness which is the great charm of geological reasoning.

Let us examine a few instances. We

have not very far to go in order to hear such phrases as, "he is gone a-hunting, a-fishing," instead of the more usual, "he is gone out hunting, fishing," &c. Now the fact is, that the vulgar or dialectic expression, "he is gone a-hunting," is far more correct than "he is gone hunting."1 Ing, in our modern grammars, is called the termination of the participle present, but it does not exist as such in Anglo-Saxon. In Anglo-Saxon the termination of that participle is ande or inde (Gothic, ands; O.H.G. anter, enter; M.H.G. ende, N.H.G. end.) This was preserved as late as Gower's and Chaucer's time, though in most cases it had already been supplanted by the termination ing. Now what is that termination ing? It is clearly used in two different senses, even in modern English. If I say, "a loving child," loving is a verbal adjective. If I say, "loving our neighbour is our highest duty," loving is a verbal substantive. Again, there are many substantives in ing, such as a building, a wedding, a meeting, where the verbal character of the substantive is almost, if not entirely, lost.

Now, if we look to Anglo-Saxon, we

find the termination ing used-

(1.) To form patronymics, for instance, Godvulfing, the son of Godvulf. In the A.S. translation of the Bible the son of Elisha is called Elising. plural these patronymics become national names; for instance, Thyringas, the descendants of Thyr, the Thuringians. Many of the geographical names in England and Germany were originally such patronymics. Thus we have the villages3 of Malling, of Billing, &c., or in compounds, Mallington, Billingborough. In Torrington there may be a trace of the Thyrings or Thuringians, the sons of Thor; in Walshingham, the memory of the famous race of the Wælsings may have been preserved, to which Siegfried belonged, the hero of the Nibelunge.4 In German names, such as Göttingen in Hanover, Harlingen in Holland, we have old genitives plural, in the sense of "the home of the Gottings, the home of the Harlings," &c.

(2.) Ing is used to form more general attributive words, such as, \(\tilde{ateling}\), a small man; and man of rank; \(\text{lyteling}\), a small man; also the English farthing, a fourth part of a penny.

This ing, being frequently preceded by another suffix, the *l*, we arrive at the very common derivative ling, in such words as darling, hireling, yearling. It has been supposed that the modern English participle was formed by the same derivative, but in AS. this suffix ing is attached to nouns and adjectives only, and not to verbs.

There was, however, another derivative in A.S., which was attached to verbs to form verbal substantives. This was ung, the German ung. For instance, clansung, cleansing; beaconing; &c. These abstract nouns in ung are more numerous in early A.S. than those in ing. Ing, however, began soon to encroach on ung, and at present no

Archdeacon Hare, Words corrupted by false Analogy or false Derivation, p. 65.
 Grimm, German Grammar, II. 348—365.

Latham, History of the English Language, i. p. 223. Kemble, Saxons in England.
 Grimm, Deutsche Heldensage, p. 14.

trace is left in English of substantives

Although, as I said, it might seem more plausible to look on the modern participle in English as originally an adjective in ing, such popular phrases as a-going, a-thinking, point rather to the verbal substantives in ing, as the source from which the modern English participle was derived. "I am going" is in reality a corruption of "I am a-going," i.e. "I am on going," and the participle present would thus be traced back to a locative case of a verbal noun.

Let us remember, then, that the place of the participle present may, in the progress of dialectic regeneration, be supplied by the locative or some other case of a verbal noun.

Now let us look to French. On the 3d of June, 1679, the French Academy decreed that the participles of the present should no longer be declined.²

What was the meaning of this decree? Simply what may now be found in every French grammar, namely, that commençant, finissant, are indeclinable when they have the meaning of the participle present, active or neuter; but that they take the terminations of the masculine and feminine, in the singular and plural, if they are used as adjectives.3 But what is the reason of this rule? Simply this, that chantant, if used as a participle, is not the Latin cantans, but the so-called gerund, that is to say, the oblique case of a verbal noun, the Latin cantando corresponding to the English a-singing, while the Latin participle present, cantans, is used in the Romance languages only as an adjective, for instance, "une femme souffrante," &c.

Here, then, we see, again, that in analytical languages the participle present can be supplanted by the oblique case of a verbal noun.

Let us now look to a more distant, yet to a cognate language, like Bengali. We there find ⁴ that the so-called infinitive is formed by te, which te is at the same time the termination of the locative singular. Hence the present, Karitechi, I am doing, and the imperfect, Karitechilám, I was doing, are mere compounds of áchi, I am, áchilám, I was, with what may be called a participle present, but what is in reality a verbal noun in the locative. Karitechi, I do, means "I am in doing," or "I am a-doing."

Now the question arises, does this perfectly intelligible method of forming the participle from the oblique case of a verbal noun, and of forming the present indicative by compounding this verbal noun with the auxiliary verb 'to be,' supply us with a test that may be safely applied to the analysis of languages which decidedly belong to a different family of speech? Let us take the Bask, which is certainly neither Aryan nor Semitic, and which has thrown out a greater abundance of verbal forms than almost any known language.⁵ Here the present is formed by what is called a participle, followed by an auxiliary verb. This participle, however, is formed by the suffix an, and the same suffix is used to form the locative case of nouns. For instance, mendia, the mountain; mendiaz, from the mountain; mendian, in the mountain; mendico, for the sake In like manner of the mountain. etchean, in the house; ohean, in the bed.

Cf. Garnett's paper on the formation of words from inflected cases, Philological Society, vol. iii, No. 54, 1847. Garnett compares the Welsh yn sefyll, in standing, Ir. ay scasamh, on standing, the Gaelic ay scalyadh. The same ingenious and accurate scholar was the first to propose the theory of the participle being formed from the locative of a verbal noun.

² Cf. Egger, Notions Elémentaires de Grammaire Comparée, Paris, 1856, p. 197. "La règle est faite. On ne declinera plus les participes présents." (B. Jullien, Cours Supérieur, i. p. 186.)

³ Diez, Vergleichende Grammatik der Romanischen Sprachen, ii. p. 114. ⁴ M. M.'s Essay on the Relation of the Bengali to the Aryan and Aboriginal Languages of India. Report of the British Association for the Advancement of Science, 1847, pp. 344-45. Cf. Garnett, l.c. p. 29. ⁵ See Inchauspe's Verbe Basque, published

See Inchauspe's Verbe Basque, published by Prince Louis-Lucien Bonaparte. Bayonne, 1858. If, then, we examine the verb,
erorten niz, I fall;
hiz, thou fallest;

da, he falls ;

we see again in erorten a locative, or, as it is called, a positive case of the verbal substantive erorta, the root of which would be eror, falling; so that the indicative present of the Bask verb does not mean either I fall, or I am falling, but was intended originally for "I am in the act of falling," or, to return to the point from whence we started, I am afalling. The a in afalling stands for an original on. Thus aright is on ritte, away is on veg, aback is on bac, again is on gegen, among is on gemang, &c.

This must suffice as an illustration of the principle that what is real in modern formations must be admitted as possible in more ancient formations, and that what has been found to be true on a small scale may be true on a larger scale. I speak thus cautiously, because there is much in the science of language to tempt us to overstep these, the legitimate limits of inductive reasoning. We may infer from the known to the unknown in language tentatively, but not positively. It does not follow, even within so small a sphere as the Aryan family of speech, that what is possible in French is possible in Latin, that what explains Bengali will explain Sanskrit. Still less would it be safe to treat all the languages of the world as if they were but modifications or repetitions of Sanskrit. Mr. Garnett, in an excellent paper on the participle, has traced similar phenomena in a much larger number of languages, and he has even endeavoured to show that the original Indo-European participle, the Latin amans, the Greek τύπτων, the Sanskrit bodhat, were formed on the same principle :- that they were cases of a verbal noun.2 In this, however, he has failed,

1 Cf. Dissertation critique et apologétique sur la Langue Basque, (par l'Abbé Darrigol). Bayonne.

He takes dravat as a possible ablative, likewise s'ds-at, and tan-vat (sic). It would be impossible to form ablatives in ăt (as) from verbal bases raised by the vikaranas of the

as many have failed before and after him, if imagining that what has been found to be true in one portion of the. vast kingdom of speech must be equally true in all. This is not so, and cannot be so. Language, though its growth is governed by intelligible principles throughout, was not so uniform in its progress as to repeat exactly the same phenomena at every stage of its life. As the geologist looks for different characteristics when he has to deal with London clay, with Oxford clay, or with old red sandstone, the student of language, too, must be prepared for different formations, even though he confines himself to one stage in the history of language, the inflectional. And if he steps beyond this, the most modern stage, then to apply indiscriminately to the lower stages of human speech, to the agglutinative and radical, the same tests which have proved successful in the inflectional, would be like ignoring the difference between aqueous, igneous, and metamorphic rocks. There are scholars who are incapable of appreciating more than one kind of evidence. No doubt the evidence on which the relationship of French and Italian, of Greek and Latin, of Lithuanian and Sanskrit, of Hebrew and Arabic, has been established, is the most satisfactory; but such evidence is possible only in inflectional languages that have passed their period of growth, and have entered into the stage of phonetic decay. To call for the same evidence in support of the homogeneousness of the Turanian languages, is to call for evidence which, from the nature of the case, it is impossible to supply. As well might the geologist look for fossils in granite! The Turanian languages allow of no grammatical petrifactions like those on which the relationship of the Aryan and Semitic families is chiefly founded. If they did, they would cease to be what they are; they would be inflectional, not agglutinative.

If languages were all of one and the special tenses, nor would the ablative be so appropriate a case as the locative, for taking the place of a verbal adjective.

same texture, they might be unravelled, no doubt, with the same tools. But as they are not-and this is admitted by all-it is surely mere waste of valuable time to try to discover Sanskrit in the Malay dialects, or Greek in the idioms of the Caucasian mountaineers. whole crust of the earth is not made of lias, swarming with Ammonites and Plesiosauri, nor is all language made of Sanskrit, teeming with Supines and Paulo-pluperfects. If we compare the extreme members of the Polynesian dialects, we find but little agreement in what may be called their grammar, and many of their words seem totally distinct. But, if we compare their numerals, we clearly see that these are common property; we perceive similarity, though at the same time great diversity. We begin to note the phonetic changes that have taken place in one and the same numeral, as pronounced by different islanders; we thus arrive at phonetic laws, and these, in their turn, remove the apparent dissimilarity in other words which at first seemed totally irreconcilable. But mere phonetic decay will not account for the differences between the Polynesian dialects, and, unless we admit the process of dialectic regeneration to a much greater extent than we should be justified in the Aryan and Semitic families, our task of reconciliation would become hopeless. Will it be believed that since the time of Cook five of the ten simple numerals in the language of Tahiti have been thrown off and replaced by new ones? This is, nevertheless, the fact.

> Two was rua; it is now piti, Four was ha; it is now maha, Five was rima; it is now pae, Six was one; it is now fene. Eight was varu; it is now vau.¹

I tried in one of my former lectures to explain some of the causes which in nomadic dialects produce a much more rapid shedding of words than in literary languages, and I have since received

¹ United States Exploring Expedition, under the command of Charles Wilkes. Ethnography and Philology, by H. Hale, vol. vii. p. 289. ample evidence to confirm the views which I then expressed. My excellent friend, the Bishop of Melanesia, of whom it is difficult to say whether we should admire him more as a Christian, or as a scholar, or as a bold mariner, meets in every small island with a new language. which none but a scholar could trace back to the Melanesian type. "What an indi-"cation," he writes, "of the jealousy and "suspicion of their lives, the extraordi-"nary multiplicity of these languages "affords! In each generation, for aught "I know, they diverge more and more; "provincialisms and local words, &c. "perpetually introduce new causes for "perplexity."

I shall mention to-day but one new, though insignificant, cause of change in the Polynesian languages, in order to show that it is difficult to over-estimate the multifarious influences which are at work in nomadic dialects, constantly changing their aspect and multiplying

their number.

The Tahitians,2 besides the metaphorical expressions, have another and a more singular mode of displaying their reverence towards their king, by a custom which they term te pi. They cease to employ, in the common language, those words which form a part or the whole of the sovereign's name, or that of one of his near relatives, and invent new terms to supply their place. As all names in Polynesian are significant, and a chief usually has several, it will be seen that this custom must produce a considerable havoc in a language. It is true that this change is only temporary, as, at the death of the king or chief, the new word is dropped, and the original term resumed. But it is hardly to be supposed that after one or two generations the old words should still be remembered and be reinstated. Anyhow, it is a fact, that the missionaries, by employing many of the new terms, give them a permanency which will defy the ceremonial loyalty of the natives. Vancouver observes (Voyage, vol. i. p. 135) that at the accession of Otu, which took place between the visit of Cook ² Hale, p. 288.

and his own, no less than forty or fifty. of the most common words, which occur in conversation, had been entirely changed. It is not necessary that all the simple words which go to make up a compound name should be changed. The alteration of one is esteemed sufficient. Thus in Po-mare, signifying "the night (po) of coughing (mare)," only the first word, po, has been dropped, mi being used in its place. So in Ai-mata (eye-eater), the name of the present queen, the ai (eat) has been altered to amu, and the mata (eye) retained. In Tearii-na-vaha-roa (the chief with the large mouth), roa alone has been changed to maoro. It is the same as if with the accession of Queen Victoria, either the word victory had been tabooed altogether, or only part of it, for instance tori, so as to make it high-treason to speak during her reign of Tories, this word being always supplied by another; such, for instance, as Liberal-Conservative. The object was clearly to guard against the name of the sovereign being ever used, even by accident, in ordinary conversation, and this object was attained by tabooing even one portion of

"But this alteration," as Mr. Hale remarks, "affects not only the words "themselves, but syllables of similar "sound in other words. Thus the name "of one of the kings being Tu, not "only was this word, which means 'to "stand,' changed to tia, but in the "word fetu, star, the last syllable, "though having no connexion, except "in sound, with the word tu, under-"went the same alteration-star being "now fetia; tui, to strike, became "tiai; and tu pa pau, a corpse, tia " pa pau. So ha, four, having been "changed to maha, the word aha, split, " has been altered to amaha, and murihá, "the name of a month, to muriáha. "When the word ai was changed to "amu, maraai, the name of a certain " wind (in Rarotongan, maranai), became " mara-amu."

It is equally clear that, if a radical or monosyllabic language, like Chinese, begins to change and to break out in

independent dialects, the results must be very different from those which take place in Latin when split up into the Romance dialects. In the Romance dialects, however violent the changes which made Portuguese words to differ from French, there always remain a few fibres by which they hang together. It might be difficult to recognise the French plier, to fold, to turn, in the Portuguese chegar, to arrive, yet we trace plier back to plicare, and chegar to the Spanish llegar, the old Spanish plegar, the Latin plicare, here used in the sense of turning towards a place, arriving at a place. But when we have to deal with dialects of Chinese, everything that could possibly hold them together seems hopelessly gone. The language now spoken in Cochin China is a dialect of Chinese, at least as much as Norman French was a dialect of French, though spoken by Saxons at a Norman Court. There was a native language of Cochin China, the Arnamitic, which forms, as it were, the Saxon of that country on which the Chinese, like the Norman, was grafted. This engrafted Chinese, then, is a dialect of the Chinese as spoken in China, and it is most nearly related to the spoken dialect of Canton. Yet few Chinese scholars would recognise Chinese in the language of Cochin. It is, for instance, one of the most characteristic features of the literary Chinese, the dialect of Nankin or the idiom of the Mandarins, that every syllable ends in a vowel, either pure or nasal. In Cochin China,2 on the contrary, we find words ending in k, t, p. Thus, ten is thap, at Canton chap, instead of the Chinese tchi.3 No

Diez, Lexicon, s. v. llegar; Grammar, i.
 p. 379.
 Endlicher, Chinesische Grammatik, par.

53, 78, 96.

3 Léon de Rosny, Tableau de la Cochinchinie, p. 295. He gives as illustrations:—

	Annamique.	Cantonnais.
dix	thap	chap
pouvoir	dak	tak
sang	houet	hœct
forêt	lam	lam.

He likewise mentions double consonants in the Chinese as spoken in Cochin China, namely, bl, dy, ml, ty, tr; also f, r, s. As final consonants he gives, ch, k, m, n, ng, p, t.—P. 296.

wonder that the early missionaries described the Annamitic as totally distinct from Chinese. One of them says: "When I arrived in Cochin China, "I heard the natives speak, particularly "the women: I thought I heard the "twittering of birds, and I gave up all "hope of ever learning it. All words are "monosyllabic, and people distinguish "their significations only by means of " different accents in pronouncing them. "The same syllable, for instance, daï, " signifies twenty-three entirely different "things, according to the difference of "accent, so that people never speak with-"out singing." This description, though somewhat exaggerated, is correct in the main, there being six or eight musical accents or modulations in this as in other monosyllabic tongues, by which the different meanings of one and the same monosyllabic root are kept distinct. These accents form an element of language which we have lost, but which was most important during the primitive stages of human speech. The Chinese language commands no more than 450 distinct sounds, and with them it expresses between 40,000 and 50,000 words or meanings.2 These meanings are now kept distinct by means of composition, or in other languages by derivation, but on the radical stage they would have bewildered the hearer entirely, without some hints to indicate their real intention. We have something left of this faculty in the tone of our sentences. We distinguish an interrogative from a positive sentence by the raising of our voice. (Gone? Gone.) We pronounce Yes very differently when we mean perhaps (Yes, this may be true), or of course (Yes, I know it), or really (Yes ? is it true ?) or truly (Yes, I will). But in Chinese, in Annamitic (and likewise in Siamese and Burmese), these modulations have a much greater importance. Thus in Annamitic ba pronounced with the grave accent means a lady, an ancestor; pronounced with the sharp accent, it means the favourite of a prince; pronounced with the semi-grave 1 Léon de Rosny, l. c. p. 301.

² Lectures on the Science of Language, i. p. 270. accent, it means what has been thrown away; pronounced with the grave circumflex, it means what is left of a fruit after it has been squeezed out; pronounced with no accent, it means three; pronounced with the ascending or interrogative accent, it means a box on the ear. Thus—

Ba, bà, bâ, bá,

would mean, if properly pronounced, "Three ladies gave a box on the ear to the favourite of the prince." How much these accents must be exposed to fluctuation in different dialects is easy to Though they are fixed by grammatical rules, and though their neglect causes the most absurd mistakes, they were clearly in the beginning the mere expression of individual feeling, and therefore liable to much greater dialectic variation than grammatical forms, properly so called. But let us take what we might call grammatical forms in Chinese, in order to see how differently they fare in dialectic dispersion, as compared with the terminations of inflectional languages. Though the grammatical organization of Latin has been well-nigh used up in French, we still see in the s of the plural a remnant of the Latin paradigm. We can trace the one back to the other. But in Chinese, when the plural is formed by the addition of some word meaning " multitude, heap, flock, class," what trace of original relationship remains when one dialect uses one, another another word? The plural in Cochin-Chinese is formed by placing fo before the substantive. This fo means many, or a certain number. It may exist in Chinese, but it is certainly not used there to form the plural. Another word employed for forming plurals is ñung, several, and this again is wanting in Chinese. It fortunately happens, however, that a few words expressive of plurality have been preserved both in Chinese and Cochin-Chinese; as, for instance, choung, clearly the Chinese tchoung,1 meaning conflux, vulgus, all, and used as an exponent of the plural; and kak,

¹ Endlicher, § 152.

which has been identified with the Chinese ko.\(^1\) The last identification may seem doubtful; and, if we suppose that choung, too, had been given up in Cochin-Chinese as a term of plurality, how would the tests which we apply for discovering the original identity of the Aryan languages have helped us in determining the real and close relationship between Chinese and Cochinchinese?

The present indicative is formed in Cochin-Chinese by simply putting the personal pronoun before the root.

Thus—toy men, I love.
mai men, thou lovest.
no men, he loves.

The past tense is formed by the addition of da, which means already.

Thus—toy da men, I loved.

mai da men, thou lovedst.

no da men, he loved.

The future is formed by the addition of chè.

Thus—toy chè men, I shall love. mai chè men, thou wilt love. no chè men, he will love.

Now, have we any right, however convinced we may be of the close relationship between Chinese and Cochin-Chinese, to expect the same forms in the language of the Mandarins? Not at The pronoun of the first person in Cochin-Chinese is not a pronoun, but means "servant." "I love" is expressed in that civil language by "servant loves." In Chinese the same polite phraseology is constantly observed,2 but the words used are not the same, and do not include toy, servant. Instead of ngo, I; the Chinese would use kuà gin, little man; tein, subject; tie, thief; iu, blockhead. Nothing can be more polite; but we cannot expect that different nations should hit on exactly the same polite speeches, though they may agree in the common sense of grammar. The past tense is indicated in Chinese by particles meaning "already" or "formerly," but we do not find among them the Annamitic da. The same applies to the future. The system is throughout the same, but the materials are different. Shall we say, therefore, that these languages cannot be proved to be related, because they do not display the same criteria of relationship as French and English, Latin and Greek, Celtic and Sanskrit? This would be to cut the wings of the Science of Language, and to confine it like a prisoner in its Aryan

cage.

As I intend to limit this present course of lectures chiefly to Greek, Latin, and Sanskrit, and their modern representatives, I thought it necessary thus from the beginning to guard against the misapprehension that the study of Sanskrit and its cognate dialects could supply us with all that is. necessary for the Science of Language. It can do so as little as an exploration of the tertiary epoch could tell us all about the stratification of the earth. But, nevertheless, it can tell us a great deal. By displaying before us the minute laws that regulate the changes of each consonant, each vowel, each accent, it disciplines the student and teaches him respect for every jot and tittle in any, even the most savage, dialect he may hereafter have to analyse. By helping us to an understanding of that language in which we think, and of others most near and dear to us, it makes us perceive the great importance which the Science of Language has for the Science of the Mind. Nay, it shows that the two are inseparable, and that without a proper analysis of human language we shall never arrive at a true knowledge of the human mind. I quote from Leibnitz: "I believe truly," he says, "that lan-"guages are the best mirror of the "human mind, and that an exact ana-"lysis of the signification of words "would make us better acquainted than "anything else with the operations of " the understanding."

It is my intention, therefore, in the present course of lectures, to confine myself as much as possible to the Aryan family of speech; and to explore more especially those familiar quarries in which we have all laboured with more

Léon de Rosny, l. c. 302.
 Endlicher, sect. 206.

or less success,—Greek, Latin with its Romance offshoots, English with its Continental kith and kin, and the muchabused, though indispensable, Sanskrit My principal object, however, will be, not so much to describe the mere structure of these languages, as to show how their analysis and comparison lead to the discovery of certain principles which ought at all times to guide and to control the researches of the comparative Philologist.

I propose to divide my lectures into two parts. I shall first treat of what may be called the body or the outside of language, the sounds in which language is clothed, whether we call them words, syllables, or letters: describing their origin, their formation, and the laws which determine their growth and decay. In this part we shall have to deal with some of the more important principles of Etymology.

In the second part I mean to investigate what may be called the soul or the inside of language; examining the first conceptions that claimed utterance, their combinations and ramifications, their growth, their decay, and their resuscitation. In that part we shall have to inquire into some of the fundamental principles of Mythology, both ancient and modern, and to determine the sway, if any, which language as such exercises over our thoughts.

A WELCOME.

BY RICHARD GARNETT.

Whose bark from Baltic isles to ours Do friendly breezes bring?
"Tis hers, companion of the flowers,
Forerunner of the spring.
On our soil her foot is set
With the firstling violet,
Mid happy trees displaying
Their boughs in new arraying.

Spring's bird, that with adventurous flights
Thy ocean way dost trace,
Mark where the herald footstep lights,
And follow to the place.
Through our isle's fair compass be
Made the merry melody
Of sky and air repeating
The gladness of our greeting.

All hail! fair stranger, gentle Bride,
Before whose face this day
A mourning robe is laid aside,
A cloud is rolled away.
Come with birds and blossoms bright,
Genial warmth and lengthening light;
And round thy path assemble
All things thou dost resemble!

A VISIT TO LÜTZEN IN OCTOBER, 1862.

BY HERMAN MERIVALE.

PART II.

SEQUEL OF THE BATTLE.

The death of the King was soon known, but seems to have had no effect in damping the ardour of the Swedes. On their side of the field, and in the centre, the road, with its ditches, and the battery of seven cannon, were soon recovered, and the neighbouring squares once more assailed and brought into utter disorder. Wallenstein's cavalry behaved ill, except some of the cuirassiers; as he afterwards complained.1 Numbers of the carbineers turned their horses' heads as soon as they had discharged their pieces, and fled in the direction of Leipzig. As for Isolani's Croats on his left wing, they executed a brilliant stroke in their own professional way. Avoiding the charge of the Swedes, they crossed the Flossgraben, wheeled to the right, turned, and rode completely round the Swedish right; made a dash for the village of Meuchen, two miles in the rear, where the Swedish baggage lay, and plundered it to their hearts' content; while, at the same time, Wallenstein had the satisfaction of hearing that another troop of his runaway Croats had made their way to the Gallows Hill, in his rear, and were employed in the same satisfactory way in ransacking his baggage and camp equipage; where, no doubt, they found loot of greater value than their brethren in the quarters of Gustavus.

But, on the west, the battle was

¹ He issued, in consequence, two remarkable orders; one enjoining more strictly the use of the cuirass; one depriving part of the horse of their firearms. He said that the trooper's habit was to discharge his carbine and pistols as soon as he came near the enemy, and then to "caracole," that is, wheel round, and get out of danger. Neither order had any permanent effect.

doubtful. Here, as we have seen, the Imperialists had set fire to the buildings about Lützen, with the view of impeding the enemy in any attempt to turn their right wing; and under the lurid cover of the conflagration and the fog. they repulsed Duke Bernard of Saxe Weimar's repeated charges, drove him back across the road, which, with the windmills beyond it, he had for a moment won, and endangered the whole left flank of the Protestantarmy. Rightly judging, however, that the real way to victory was to follow up the advantage obtained by the Swedes on the east, Bernard, as soon as he heard of the King's death, moved in person to that quarter, leaving the command of the left to Nils Brahe, whom the King had named as the best qualified to command an army of all his countrymen, except And Brahe justified the Torstenson. confidence reposed in him by driving the Imperialists once more from their windmills, and turning their own cannon against them. Bernard hastened to Knyphausen, who commanded the reserve, and informed him of the King's Knyphausen, a cool veteran, death. simply replied that his troops were in good order, and could make an excellent retreat. "It is the hour of revenge, not retreat," was Bernard's answer, as he hastened to place himself at the head of the same Smaland regiment which Gustavus had led into action. Only just in time; for Pappenheim now appeared, bringing his whole cavalry, six or seven thousand men, to strengthen Wallenstein's left, but leaving his infantry still on the march. The accounts of the exact period of Pappenheim's arrival vary singularly. The old French contemporary narrative, translated and reprinted in the Harleian Miscellany, says expressly that it was between two

and three o'clock; but this seems too late. Wallenstein, in his short report to the Emperor, ingeniously implies, without actually asserting it, that Pappenheim was with him at the commencement of the action—evidently a fib, to draw off attention from his own blunder in having detached him two days before. And now the Swedes had to draw up once more their shattered brigades, with their backs, as it should seem, to the high-road, and abide the furious charge of Pappenheim's cavalry. Pappenheim himself led them on, exclaiming, "Where is the king?" but at the very first onset fell, pierced with two bullets, and was carried out of the field only to die. The last hasty order to rejoin Wallenstein, which he had received from that general, was found beneath his gorget, stained with his blood, and is now preserved in the archives of Vienna. Such was the end of the noblest among the servants of the Kaiser; not only brave to a fault, but displaying in his subordinate capacity high qualities of general-Gustavus himself emphatically ship. termed him "the soldier;" the learned called him, from his prodigious personal strength, the Telamon of the Imperial army. His soldiers adored him, and the populace bestowed on him that superstitious awe with which, in those days, they loved to encompass their favourites; he was born on the same day with Gustavus, they observed, and subject to the same stellar influence; his forehead was marked with two cross swords, which came out fiery red in moments of excitement; nay, the evidence of his nurse was gravely invoked, to establish that he cried when he was first washed, and never afterwards in the whole course of his life! Out of the field as well as in it, he passed for a model of old-fashioned chivalry; a devout and humble Catholic, of blameless life, and strong domestic attachments. There is extant the tenderest of all possible new-year's letters to him (printed by Förster, in his Wallenstein's Prozess: Germans will print everything) from his wife, "her loveliest "angel's submissively obedient maid-"servant Anna Elizabeth," who describes

herself as dying "vor langer Weile" in his absence. Pity that her lord's hand, which she "kisses many million times," was still red with the blood of Magdeburg, shed in participation with

the ferocious Tilly.

Under the cover of this reinforcement, Wallenstein rallied part of his troops; and then began the fiercest struggle of this day of many vicissitudes; one which every witness and every historian describes as of unexampled severity. The question was, in Wellington's words, which of the two shattered armies "could pound the longest." Nils Brahe was killed, his brigade beaten back across the road; the whole Swedish infantry, of the first line, was almost cut to pieces. In half an hour, says one writer, the entire yellow regiment lay on the ground, in order, where they had stood before. The fog, towards the close of the day, descended thicker than ever; but it suddenly cleared again half an hour before sunset; and then Bernard, reduced to the last straits to hold his ground, discovered, to his infinite satisfaction, that Knyphausen's reserve remained in unbroken order, as yet untouched by the enemy. The sorely-thinned remnants of his first line rallied in the interval of the second, and Knyphausen's charge decided the day. For the last time the road was crossed; the Imperialist cannon captured. And now the early November darkness came on. Just at this crisis arrived Pappenheim's infantry, six regiments strong. they charged the Swedes, the event of the day would probably yet have been different. But they took no part in the action. According to the common account, they were prevented by the darkness. But among the Imperialists the notion spread, that the advance of these battalions was arrested by the order of Marshal Holk, who, at this crisis, commanded Wallenstein's left, and who was thought to have been long meditating treason. This question, like many others raised in that age of dark suspicions, must remain undecided; for Holk died shortly afterwards, and "made no sign."

Wallenstein retreated on Leipzig under cover of the night. He left, it is said, 8,000 or 9,000 of his troops, with 5,000 or 6,000 Swedes, killed or wounded on the field of battle. The Swedes remained masters of that field, and in possession, after many vicissitudes of taking and retaking, of most of the enemy's heavy cannon. Gallas, in his report of the battle, makes an excuse for this loss which is curious, and may be true: he says the artillerydrivers were peasants, impressed, with their horses, from the neighbourhood of Leipzig, whose heart was on the other side, and who, as soon as they found opportunity, cut the traces and abandoned their charge. Wallenstein, however, at first claimed the victory in his despatches, chiefly on the strength of the King's death. But his own exasperation at his defeat was intense. According to one story, as soon as he arrived at Leipzig, he "shut himself up in a room and swore for an hour;" which, says Philippi, oddly enough, "is scarcely " credible, considering his well-known " disposition to silence." At all events he allowed his mortification to rankle, deeply and grimly, in his breast. until he had rallied his beaten army as well as he could, and established it in winter-quarters in Bohemia, abandoning Saxony to the victor, did he proceed, in cold vindictiveness, to hold his "bloody assize" on those who had misconducted themselves in the action. His wrath was particularly directed against his cavalry officers, who had fled from the field. About a dozen, colonels and others, were executed, and many sentenced to inferior punishments. "Good people," said one young colonel to the crowd, at his execution, "I am come " here to die for running away together " with my generalissimo." At the same time, with his accustomed liberality or policy, he made magnificent presents, on his own part and not the Emperor's, to those who had distinguished themselves,

For my own part I must say, though quite aware of the storm of Teutonic indignation which such an avowal is likely to provoke, that I never could get rid of the impression that the magnifi-

cent Wallenstein was in truth a great impostor-a humbug of enormous pretensions. His whole demeanour savours of that intimate combination of enthusiasm with jugglery which imposes most successfully on mankind. He was an actor through life. A subtle Italian spy. set to watch him in 1628, describes his "bizarre" and violent manners as nothing but a trick, assumed in order to deceive at once the multitude by an appearance of power, and his superiors, by persuading them that one capable of such extravagance could not be capable of connected designs. In addition, he could import at will into his proceedings that touch of the mystic, that smoke-flavour of the supernatural, which especially influences his wonder-loving countrymen. Of the real genius of the general or the statesman, I cannot find that his life exhibits a single trace. But he was, above all things, Fortune's favourite. I do not remember where I fell in with a pretty piece of criticism on a picture of Gérard's, in the French division of this year's Exhibition, not so interesting from its execution as from its quaint fancy. The goddess Fortune - arridens nudis infantibus—has fallen in love, beside a village well, with a charming infant boy. Her wheel is resting at her feet-her cornucopia is pouring out its neglected treasures-while the saucy little idol is laughing in her face, and fencing with her hand as it caresses his dimpled cheek. affairs of this unstable world are at a standstill while she indulges in her fancy; and, as for the unconscious child, he may be anything he pleases—cardinal, pope, emperor, Wallenstein, Napoleon. Those whom the blind goddess thus selects have about them something dæmonic, as the Germans express it. Wallenstein's life, so dazzling in its midcareer, is veiled in mystery both at the beginning and the end. The cadet of a poor though noble Bohemian house, the third son of a sixth son, both his parents addicted to the Protestant persuasion, his prospects of rising in the Austrian service might have seemed slender enough; but, just as he is entering on the world, both of these parents are

removed out of his way by death. He falls under the guardianship of a rich Catholic uncle, delighted to make a convert of so promising a relative. He travels, no one exactly knows how, nor where; becomes familiar with many parts of Europe; and, like Michael Scot, "learns the art that none may name," at Padua, under a professor of astrology. At five-and-twenty, he makes, like Macaulay's Marlborough, a prudential investment of his personal charms, but in a more legitimate way; marrying a rich widow of twice his age, who becomes desperately jealous, nearly kills him with a love-potion, dies forthwith, and leaves him her fine estates in Moravia. uncle immediately follows her, and bequeaths him seven first-class lordships in Bohemia. At thirty, the adventurer is the richest subject of the Kaiser; yet not so rich as to account at all for his subsequent gigantic expenditure. He marries another fortune, and a court lady of high influence into the bargain. In the death-struggle of his native Bohemia he takes no part; but, immediately after the battle of the White Mountain, he comes forward with seven million florins-nearly a million sterling —to buy up from the Court of Vienna the confiscated lands of his countrymen and relations. "His extraordinary command of money," says his English admirer, Colonel Mitchell, "still remains an enigma in his history." But the land, it is added, was worth five times the money. He is now a prince, and, unlike other princes of that day, a man of ready millions into the bargain. He raises forty thousand men at his own expense; gives away fortunes; builds castles, palaces, towns; lords it over North Germany, from the Mayn to the Baltic; continues his vast system of landed investments, taking care, however, to set off his "military expenses" against the purchase-money, and thus reducing the actual cash, received by his imperial vendor, to a fraction. His property is now estimated at thirty. millions of florins, or four millions sterling-a sum which must be trebled or quadrupled to suit modern calcu-No. 41.—vol. vii.

lations. He is the first man in Europe for wealth and prestige, for the power of ruling mankind, and overawing them by the exhibition of grandeur and sternness; not to omit those qualities so dear to the German heart, his glorious contempt for Jesuits, Frenchmen, Spaniards, Italians, and Welschen of every colour, and his solemn pretensions to supernatural knowledge. Yet all this time, his exploits, in a military sense, were as nothing. He never won a pitched battle, properly so called, in his life.1 His campaign on the Baltic, announced with such flourishes of trumpet throughout Catholic Europe, proved a wretched failure. He kept his armies togetherit cannot be said, kept them in ordermerely by the assiduous use of the two coarsest stimulants: the terror of sanguinary discipline, the attraction of unlimited plunder. For the execution of his purposes he shrank from no cruelty whatever: and Wallenstein, who, in good sooth, was quite free from religious zeal, and cared no more for the Pope than for Luther, left among his contemporaries a name as deeply stained by savage excesses as that of the fanatic Tilly himself—"unmerciful "in his executions, inexorable in his "commands, incessantly thirsting for " money:" " odium et nausea generis "homini," so he is designated by his Court enemies. These enemies, and the cry of oppressed provinces, prevail against him. In 1631, he is superseded from his command, and submits to his fall with that curious composure sometimes met with in overbearing men, when fairly mastered; for he was "timid," as our sharp Italian described him, "towards those who show "their teeth;" and that philosophy of resignation, which his biographers term magnanimous, may, if read by the light of his subsequent history, be interpreted as a kind of moral col-"You may read it yourselves in the stars," he said to the astonished

1 "Viel Kriegsmacht hat er zusammengebracht,

Doch nie geliefert recht eine Schlacht," says one of his jingling epitaphs.

envoys who brought him the news of his dismissal, and who expected a violent scene, "that the Genius of the "Elector of Bavaria1 dominates just now "over that of the Emperor." And he retired without a murmur into private life—but that of a Diocletian. Called once more forth in the disastrous position of Austria after the battle of Breitenfeld, he rallies at once round him all the Catholic elements of the Empire -raises a hundred thousand men, contrives somehow to pay them, and takes the field against Gustavus; but, when there, the marvellous adventurer subsides into a general of very ordinary quality. His most distinguished achievement consisted in judiciously declining to fight the Swede at Nuremberg, with seventy thousand against fifty thousand, and preferring a war of intrenchments-a commendable policy, doubtless, but which ended only in the decimation of both armies, and in his own crowning defeat at Lützen. His tactics in that battle have been described, and their consequences. But slowly and, as it were, reluctantly, did Fortune abandon her strange favourite. The death of Gustavus gave him more than he lost by He became again, and more than ever, sole master of his own side in Germany; but he lost his vantage in the vain endeavour to become what the stars could not make him-arbiter between the two sides, and reconciler of parties fighting for convictions which he could scarcely comprehend. And now the want of real stamina, of which I have spoken as the negative basis of his character, becomes painfully apparent. Whatever doubts may have formerly pre-

1 "Ihr Herren, aus den Astris könnt ihr es selbst sehen, dass des Kurfürsten von Baiern spiritus dominirt über des Kaisers seinen." Such was the wonderful jargon which Wallenstein, as well as other distinguished Germans, then wrote, and, as it seems, spoke. Here is another specimen, from a report which he made to the Emperor of an action against Gustavus:—"Der König hat auch damit sein Volk über die Massen decoragirt, dass er sie so hazardosamente angeführt, dass sie in vorfallenden occasionen ihm desto weniger trauen werden,—und ob Ew. Mag. Volk valor und courage zuvor überfüssig hat, so hat doch diese occasion sie mehr assicurirt."

vailed, recent discoveries seem to place it beyond a doubt, first, that his schemes included treason to his sovereign and ingratitude to his benefactor; next, that they were both conceived and carried out with an imbecility of purpose which takes all grandeur from his crime. Then-when detected and exposed, when chief after chief deserted him, and the net of destruction was drawing closer and closer round him-his presence of mind and fertility of resource seem to have failed him altogether. He opposed to his destiny nothing but a kind of proud but dull self-confidence, which partook less of dignity than of the fatuity of despair, and exposed his bosom to the halberts of his military executioners only when absolutely at his wits' end to finish the drama by any other catastrophe.

Such was the Wallenstein of history, according to the best of my judgment. How strangely different from the Wallenstein of poetry! And yet while the historical "Duke of Friedland" is only a vague remembrance in men's minds, except those of a few painful antiquaries, the hero of fiction has become a reality, as far as the intimate sympathy of thousands of readers can make him so. The subject is a threadbare one now; yet it is scarcely possible to dismiss him from our thoughts without letting them dwell a while on that incomparable work of art, the Wallenstein of the drama, the central figure of Schiller's magnificent trilogy. Not that he is a character of the highest dramatic order, properly so called. He is not life-like, as is a hero of Shakspeare—one whom we seem to have known, and could recognise in the street; there is something vague about him. Perhaps the sharpness of outline has been a little rubbed off by elaborate execution. He is less an individual man than an embodiment of a thousand thoughts, instincts, emotions. But then-and that is the secret of his triumph—these thoughts and emotions are our own. Different as our sphere of destiny may be from Wallenstein's, the texture of life, whether the fabric be small or great, has its warp and woof of the same hopes, fears, meditations, disappointments; and Wallenstein has a word suited for every mood of him who is struggling to attain success in life, or struggling to keep his position there. As Hazlitt said with such truth of Hamlet, it is we who are Wallenstein. And it is in this point of view that the thread of superstition, which Schiller took from his historical authorities, is so wonderfully interwoven in the poet's design. That superstition seems almost an anomalous trait, in a spirit so refined and so cultivated as the dramatic Wallenstein's: it has no overpowering influence; he can throw it at times altogether aside: but it is a pervading agency, mixing with all others, and making him, not inferior —as in the hand of a less skilful artist he would have become-but superior to his fellows, men trained only in this world's ordinary cunning. Now, for us, or most of us, in this waning nineteenth century -for those, at least, who cannot get up any interest in the material communications with the invisible world conveyed by table-turning and spirit-rapping, cold hands under green baize, and ghosts playing accordions—such vague and shadowy impulses as those which haunt the mind of Schiller's hero, rather than influence his firm judgment, constitute the last influences whereby the "anarch old" Superstition still maintains a relic of her dominion. Who is there among us whose heart has not seemed to move in unison with his, when he exclaims that-

it

in-

raey

th

all

en

er

le-

er

ed

8-

ut

88

ir,

ts

en

he

y,

ıl-

ne

a

X-

s,

as

ds

b-

is

m

m

k

1e

at

 \mathbf{of}

80

ro

to

ie

ıt

ıe

0-

al

1-

ıt

is

18

e

s,

"There are moments in the life of man When he is nearer to the world's great Spirit Than is his wont, and may at pleasure ask One question of his fate. "Twas such a moment

When I, upon the eve of Lützen fight, Leaning against a tree and full of thoughts, Gazed forth upon the plain;"

Or when, in the ominous darkness of the night of his murder, he longs for one glimpse of Jupiter—

"Methinks,
Could I but see him, all were well with me.
He is the star of my nativity,
And often marvellously hath his aspect
Shot strength into my heart."

And so farewell to Wallenstein and to Gustavus-characters over which the imagination lingers, though one was assuredly both worse and lower than his reputation: the other so far elevated by fate and his high purpose above the ordinary sons of men that he loses something of mere human interest. Such as they were, they left no successor behind them. Except the short-lived hero, Bernard of Saxe Weimar, no subsequent personage of that war has made any appreciable mark in history. Uncontrolled by master spirits, the contest lingered on, bloodier and more indecisive, till, out of the two parties, the one bent on subjugation, the other on independence, a mere confused and mangled residue remained, with scarcely voice enough left to expend in feeble groanings for peace at any price. Famine, sword, and pestilence had uprooted a whole generation. Equal horrors may have occurred in barbarous countries, but never, assuredly, in a civilized and Christian community like that of Germany, where numberless active pens were engaged in chronicling them. Its population, say some authorities, shrank from sixteen or eighteen millions to four millions. Whether this be accurate or no, one curious evidence of the extent of depopulation is to be found in its forest history. The country had thriven so greatly in the fifteenth and sixteenth centuries, that its vast sylvan riches were beginning to show symptoms of In North Germany nuexhaustion. merous edicts were issued before A.D. 1600 for the preservation of the woods. It is recorded of a certain Duke Augustus of Saxony, that, on his walks, he always carried a hollow brass rod filled with acorns, to drop one by one into the ground. There are three things, Melanchthon used to say, which will fail before the end of the world comes: good friends, good money, and firewood. The Thirty Years' War effectually adjourned these complaints to another age. The forest covered again whole tracts which had been under cultivation. What with the diminution of people, and what with the increase of wood, no need of the old kind seems to have been again felt until the middle of the eighteenth

century; and it is said that the forests had then become so overgrown, that the tempestuous seasons which prevailed 1780-1790, destroyed many square miles of them. Germany went back in cultivation, and in political spirit and independence, even more than in mere numbers; it required a Frederic the Great to

raise her again after a hundred years, and that but partially; and even the Germany of the nineteenth century, in which political lags so far behind every other class of thought, bears the impress of that long reign of darkness and terror which broke down the mediæval spirit of self-government.

VINCENZO; OR, SUNKEN ROCKS.

BY JOHN RUFFINI, AUTHOR OF "LORENZO BENONI," "DOCTOR ANTONIO," ETC.

CHAPTER XXVI.

AN INTERESTING DEFINITION CUT SHORT.

It must not be supposed from Rose's ambiguous answer to her father's covert inuendo, that she had not drawn her own conclusions from the short dialogue given in the last chapter; and these conclusions were, that her father would never have spoken to her as he had done, had he not altered his mind with respect to Vincenzo's suit-nay, even accepted him as his future son-in-law, subject of course to her consent. She was confirmed in this view of the case beyond all doubt, when she heard her father, as the weeks passed, repeatedly alluding to Vincenzo's expected visit during the vacation as a settled matter. Well-the consciousness of all this, added to newly-awakened feelings in her own bosom for her old playmate, gave to her reception of him, when he did come, a tinge of reserve and embarrassment which made it quite a different affair from what it had been up to this day. The alteration in her manner could not fail to react on the young lover, even had he not had other causes to make him look and feel embarrassed on his side: the chief among these causes being his certainty that she was in possession of his secret through Barnaby-the old fellow's evasion of any promise of secrecy, when Vincenzo had tried to extract one from him, too clearly implying a predetermination to use his own discretion, or rather indiscretion, as to telling or not telling.

Nor was this shadow, which had fallen upon them, confined to their first meeting: it resisted the action of time, and hung more or less over their subsequent intercourse. Now and then the one or the other would fall into old ways, use the once familiar intonations. talk on once familiar topics; but, then, this always occurred in the presence of a third person, never when alonethough, indeed, that they seldom were. Not that they positively avoided each other's company, only they did not seek to be tête-à-tête as of yore; and, when a chance rencontre threw them together, it was curious to observe how studiously one or the other, or both, tried to put between them somebody else-either tottering Don Natale, or Barnaby, or Giuseppe, or (at a later period, when there were several visitors staying in the palace) any of the guests. Since we have named Barnaby, let us mention that, from the moment of Vincenzo's arrival, he had magnanimously resumed communication with his master on the old footing. Even Rose's father, who was anything but a keen observer, could not help at last noticing this state of constraint between the two young people; and, much as he wished to set them at their ease, he still shrank from pronouncing the word which alone could do so. Had he, then, once more changed his intentions? Yes, and no. The Signor Avvocato still faithfully adhered to the engagement he had taken with himself to give his daughter to Vincenzo; at the same time there is no denying the fact, that all the ardour in the matter he had brought back with him from Turin had vanished. Two full months of reflection had given him time to measure the void which Rose's absence would leave in his home-surely it was a sacrifice for which there need be no hurry! She was so young-but just nineteen-and Vincenzo himself was hardly yet of the age at which young men marry! He should have her—in a year or so—when his bright prospects began to be realized! And so, from one thing to another, the good gentleman had ended by consigning the evil to that distant future sine die so dear to spirits irresolute.

Having once established himself comfortably in this passive position, Rose's father naturally dreaded nothing so much as shifting it for one where there might be something to do; hence his unwillingness to break the ice, at the risk of making a question, which he hoped he had set at rest for ever so long, one open to discussion. But, being as soft-hearted as he was incapable of decision—that is, wishing to mend the situation without renouncing the status quo-he hit upon a middle course, which only made matters He took to giving little hints, which were meant to be encouraging, but which proved only the source of new perplexity to the parties concerned. For how could Rose, a bashful girl just awaking to love, or Vincenzo, discreet as we know him to be, and bound moreover by a solemn promise—how could they be expected to take advantage of such vague insinuations?

Luckily, the acute period of the trial to both the young people was short, extending scarcely over the first three weeks of Vincenzo's stay at the palace, while there were as yet no strangers there, or only a stray one or two. The end of July brought an influx of guests, which went on without any solution of continuity to the end of the season. Rose's

time was in consequence much occupied, Vincenzo's society much in demand, and there were no opportunities for têtes-d-

The Signor Avvocato was repaying, by this hospitality, the many debts of kindness which his elevation to the knighthood of San Maurice and Lazare had entailed upon him. Foremost on the list of his invitations stood his relations and old friends in Turin, including his new one, Signor Onofrio-who, however, had declined going to Rumelli on the plea of business; then his friends of Ibella, comprising most of the functionaries there, the Intendente at their head-all of whom had called to congratulate him on his new honours; and after them, the mayor of this place, and the parson of that, who had performed the same civility, and so on. Of course, this mighty array of guests were not asked in a lump, but in driblets of six or seven at a time; to which if we add chance visitors, we arrive at an average of no less than ten persons enjoying at one time the hospitality of the palace; and a cordial, unceremonious, plentiful hospitality it was, worthy of a true knight of old. It rarely happened but that the company should be more than doubled on Sundays by arrivals from Ibella and Rumelli, Don Natale for certain among these last. We do not see young Del Palmetto figuring in any of these gatherings, for the very peremptory reason that he had long ago left the castle in high dudgeon: in fact, he had gone away immediately after he had been given to understand that Miss Rose (to use Barnaby's metaphor) "was no bread for his teeth." And so the villeggiatura went on happily through the usual months, until the time came for Vincenzo and the few visitors who had lingered to the last also to take their departure. After breakfast of the morning previous to Vincenzo's departure, the Signor Avvocato had a long, confidential talk with his godson, chiefly about the probable epoch of his being employed, the nature of the employment, and its locality. On these two last points, Vincenzo could throw no

light whatever, but volunteered to inquire, if an opportunity should present itself naturally for so doing: as to the first question, he could only repeat, what he had already told the Signor Avvocato when in Turin, that the minister had expressed his positive intention of employing him as soon as he should

have taken his degree.

"Ah! and in May next," said the Signor Avvocato, "you will be just turned three-and-twenty, an age when a youth begins to know a little what he At the end of five or six is about. years at the longest, we may reckon on your having got something very fine—a first-class Intendenza, let us say, or a secretaryship ;—I don't mean of State," added he, smiling at his own wit; "you must be a deputy before you can be that-but the secretaryship of some embassy. You will be then twentyeight or twenty-nine, exactly the fit age to marry. By-the-bye, Rose consents of course ?"

"Consents to what?" asked Vin-

"To what?-why, to marry you!" "To know that, I must have asked

her, and . . . "

"And you have not?" resumed the Signor Avvocato. "What the deuce! Do you expect me to make a declaration for you?"

"That is a trouble, I think, I can spare you," said Vincenzo, "if you only

give me leave."

"Give you leave! Have I not been giving you leave every day during these

whole three blessed months?"

"I beg your pardon, sir," said Vincenzo: "you have more than once, it is true, kindly alluded to a possible happy consummation of something that was wished for, but what that something was you always left in a mist; and could I, on the strength of such obscure hints, consider myself freed from the strict promise of silence which you had exacted from me in Turin ?"

"Well, perhaps not," said the Signor Avvocato; "I give you credit for un-

usual prudence at all events."

"In which I give you fair warning I

shall not persevere now," said Vincenzo coaxingly, and rose to go.

"Where are you going ?" asked his

godfather, quickly. "To pray the daughter to ratify the

father's consent," returned Vincenzo. "Dear me-what a hurry you are in all at once !" said the Signor Avvocato, with a slight degree of vexation.

"My time here is short-only twentyfour hours left: I must make the most of it," replied Vincenzo, and hastened

The old gentleman watched him depart with a very rueful countenance; had he dared he would have forbidden him to go-forbidden him to speak; he lacked the courage to do so, after what had passed between them. His good heart had betrayed him, in the impulse of the moment, into being more explicit than he had intended to be; and thus, in a twinkling, was lost all the advantage of his temporising policy of months and months.

Vincenzo, having sought in vain for Miss Rose indoors and in the garden, bethought himself of her favourite retreat, the belvedere, already so often mentioned, and took the shortest way thither, through the avenue of walnut trees, which he had scarcely entered before he espied Rose coming towards him from the other end. Vincenzo hurried on, and the two were face to face in a few instants.

"Good morning, Miss Rose! I came here in the hope of finding you."

"Did you?" said Rose, with a little surprise. "Well, here I am."

"I have something to say to you," began Vincenzo.

"I am listening," said Rose, not without a little flurry of expectation.

"I think I shall say it best if we walk on," said Vincenzo.

"As you like," said Rose, and moved

on by his side.

Be it chance or design, he led the way down the avenue. "Are you charitably disposed?" asked he, after a short pause.

"I think I am," said she, with a half

smile.

"Because," resumed Vincenzo, "I am going to plead guilty to a great presumption."

"That is the last sin I should ever have suspected you of: it must be one

of very fresh date."

"On the contrary, it is one of my very oldest and most inveterate; and it dates, as far as I can remember, from the first day I saw you." .

"As old as that—you alarm me!" said Rose, trying to smile. "What a dissembler you must be, to have hid it

so long from me!"

"Have you then never guessed that

I-I... loved you, Rose ?"

She blushed scarlet, and said, "Is that your sin of presumption?"

He looked at her and bowed his head. "But there is no sin in that. Are we not desired to love our neighbours as ourselves?"

"Yes, but the love I speak of is of quite another kind; it is, to begin with, of a more passionate nature; it is exclusive and interested, so much so

A shout from behind stopped the definition short; the young lady and gentleman turned round and saw the Signor Avvocato hobbling after them. However unseasonable the interruption, there was nothing for it but to go and meet the old gentleman.

"Six years hence-six years hence, remember," cried the Signor Avvocato, as soon as he could make himself heard.

"What is to be six years hence, papa?" asked Rose.

"Why, the wedding to be sure," said

"The wedding?" repeated Rose, in

unfeigned surprise.

The Signor Avvocato stared at her in utter perplexity, then at Vincenzo, then at her again, and at last said, "Yes, the wedding-that is, if you agree to it."

"Agree to what, papa ?" cried Rose. "Zounds! as if you didn't know,"

exclaimed her father, losing all patience; "if you agree to marry that young man by your side,-I speak plain enough now, I hope."

Poor Vincenzo blushed up to the

very roots of his hair, less at the statement itself than at the prosaic way in which it had been made. Rose did not look alarmed, or shocked, or even em-She simply said, "How barrassed. could I know if nobody told me?"

The Signor Avvocato turned a signi-

ficant eye on Vincenzo.

"You left me no time," returned his godson, with a little testiness. "You seem, after all, quite determined to make the declaration for me; will you be so good, at least, as to complete it?"

"Complete it—how?"

"When any one presents a petition, he expects and hopes for an answer, does he not?" said Vincenzo.

"Ah! well-true-you are right. Well, Rose my dear, now is the time to

make up your mind."

"Is it?" said Rose, archly. "I will some day during these next six years,"

and she ran away.

For the first time in his life was his godfather's company a bore to Vincenzo -not that it was an obstacle to his following Rose, and pressing her for an answer-he was in no mood for that: the sort of game at cross-purposes to which chance had lowered what was to have been the solemn effusion of his heart of hearts, had told too painfully upon his feelings, to leave him liberty of mind enough, or indeed the inclination, to urge his suit just then; but to have to listen to that prosing, and for form's sake to make some kind of answer, while longing for silence and solitude, was, to the young man, a real trial. At last the Signor Avvocato felt the necessity of rest for himself, so returned to the house; and Vincenzo, under the pretext of having some visits to pay in Rumelli, released himself from further bondage. A solitary walk of a couple of hours did much towards dispelling the gloom that had gathered over him, and Rose's smooth brow and smile full of promise, when he met her at dinner, completed the cure.

The Signor Avvocato, contrary to his wont, was very active and busy during the rest of the day; he had manifold directions to give his daughter, manifold

commissions for Vincenzo to execute. He insisted on going out with them for a walk five minutes after having complained of being tired. In one word, the poor father did his best to keep them asunder: and, to a certain extent. succeeded in the attempt. But all the trouble he gave himself and others could not and did not prevent the young couple from occasionally exchanging confidential whispers, by which, to judge from appearances, they arrived at an entente cordiale. At least Vincenzo's face, when he left on the morrow, was not that of a rejected suitor, nor Rose's that of an unrelenting beauty.

The Signor Avvocato kept his room the whole of that day, so worn out was he by his extraordinary exertions of the

day before.

CHAPTER XXVII.

THE INTERRUPTED DEFINITION CONCLUDED.

A WEEK, two weeks passed. Rose was as silent as a tomb—Vincenzo was gone away for six months. All being thus arranged for the best in this best of possible worlds, what could the Signor Avvocato do, but sink again on his soft couch of procrastination, and lull himself to sleep on it?

Little thought our Fabius Cunctator that an enemy to his repose lay in wait for him at Ibella. Yes, he was no sooner settled there comfortably for the winter. than no less a personage than the Signor Intendente waited on him, and asked point-blank for Miss Rose's hand. Had the Intendente asked him for his purse or his life, the good easy gentleman could not have been more startled. To say no to anybody cost him an effort at all times: à fortiori to say no to the head authority of the province, and that at a minute's notice, was a herculean task He lashed himself up to it indeed. though: but in his fear of offending, in his eagerness to soften the blow, he wandered into a maze of explanations, got entangled by his own words, and made a nice mess of it.

The amour propre of the Intendente being mightly wounded by what he per-

ceived to be nothing but a beating about the bush, he had the bad taste to insist on knowing on what grounds a man of his rank and official standing was rejected. The Signor Avvocato, at his wit's end, protested and reprotested that it was on no grounds personal to the Signor Intendente; far from it, he felt all the honour conferred on him by a proposal from so distinguished a person; were it in his power, he would be only too happy, but as it was, he regretted to say he had nothing but grateful thanks to offer-circumstances existed early inclinations-young ladies would have their way nowadays; he begged to be spared the necessity of being more ex-Upon this the rejected suitor plicit. retired in no very pleased mood, and the Signor Avvocato, after a sonorous ouf! of relief, said to himself aloud, "Rather than be worried with more applications of this sort, why, I'll marry them at once."

Not long after D. Natale called on the Signor Avvocato on some parish business. "By-the-bye," said the old priest, "I am glad to hear that we are soon to eat confetti, sugarplums," (an idiom tantamount to saying "We are soon to have

a wedding"

"Who is to be married?" asked the

Signor Avvocato.

"No use playing the Indian," retorted D. Natale: "such discretion is ill-advised towards an old friend like me, when all Rumelli and Ibella are in the secret. Then you know that I always liked the boy, thought highly of him. You will have a good bargain in him for your son-in-law."

The Signor Avvocato's features fell he was beginning to understand the

allusion.

"And mind," ended the priest, "it is old D. Natale who is to give the blessing—I'll never forgive you if I don't."

"All Rumelli and Ibella are in the secret!" thought the Signor Avvocato.

"How can they know?"

Obviously enough, they knew from an indiscretion of the Signor Avvocato himself. When, in the eagerness to gild the pill for the Signor Intendente, he had let fall the expression "early inclina-

tions," it was much the same as if he had said, in so many words, that Vincenzo was to be his daughter's husband. For to no other could those words apply, but to Vincenzo or young Del Palmetto, with both of whom Rose had, to a certain age, been brought up. Now, it being notorious that the young lady had rejected Del Palmetto, the "early inclinations" could only refer to Vincenzo. Undoubtedly, it was ungenerous in the Intendente to take advantage of an unguarded word, to sound the trumpet about this match; but the Intendente was piqued, and pique is never generous.

There yet remained a hope, that it might all be a fancy generated by that weakened brain of D. Natale. The matter, though, was worth inquiring into. there was any foundation for D. Natale's assertion, Barnaby would be sure to know; but, then, to question Barnaby was to create the evil, if it did not exist. No, it would not do to apply to Barnaby. Giuseppe was the man-he could be trusted. And forthwith, the dairyman who brought the milk to the Signor Avvocato's town-house, and to market every day, was charged with a message summoning Giuseppe to Ibella. seppe came. The Signor Avvocato evinced the greatest anxiety to learn whether the late frost had done any injury in the nursery of young mulberrytrees, and, being reassured on that point, had many other items about which to ask . and to be enlightened. At last came the P.S :-

"And how do you amuse yourselves up there in this weather? I hear there's plenty of idle gossip going on, eh?"—Giuseppe was not aware that there was any particular gossip going on in Rumelli.

"I was told," went on the Signor Avvocato, "that a report had got abroad about my daughter being engaged to be married. Has it reached your ears?"—The report mentioned by the Signor Avvocato had reached Giuseppe's ears.

"And pray, is it said to whom she is engaged?"—The name of Signor Vincenzo had been mentioned.

"Was such a rumour generally current?"—Pretty much so. "And in the town also?"—As to that Giuseppe could not answer.

"And is any particular time assigned for the wedding?"—The coming Michaelmas was spoken of, said Giuseppe; who did not deem fit to add that, according to another version, the marriage was to take place as soon as Signor Vincenzo had finished his studies. Giuseppe was a born diplomatist, and confined himself to the strictly indispensable. In all likelihood he had never heard of the famous "pas de zèle," but he acted up to it.

The Signor Avvocato, when left alone, rubbed, and rubbed again, his partially bald pate. It was pretty certain, that what was the common talk of Rumelli could not but be the talk of Ibella. There was little risk, he perceived, in sounding Barnaby. Barnaby was therefore summoned, and subjected to a cross-examination. His evidence was the counterpart of Giuseppe's, with only this difference—that he was as positive and incisive in his assertions as Giuseppe had been cautious and guarded. Was such a rumour rife at Ibella? Bless his heart! nobody talked of anything else. The whole town applauded the Signor Padrone's choice. It would be a general disappointment if the wedding were delayed till Michaelmas, as some folks For his part, Barnaby hoped and trusted that the moment Vincenzo had passed his last examination, the mine would explode—the sooner the better. The dear young ones had been on the rack long enough. See how they were pining away. As for Vincenzo, he was mere skin and bone

"How do you know? You haven't seen him for more than two months."

Barnaby, ignoring the interruption, went on: "And the blessed Signorina! Why, she is only the shadow of her former self: the bloom has left her cheeks—no smiles on her lips...."

"What stuff are you talking?" cried the Signor Avvocato. "Rose is as fresh as a rose, as plump as a quail, as merry as a bird"

"Is she? Well, suppose she is; but wait another six months, and see then what she will have shrunk into. Forewarned, forearmed: marry them at once,

I say, or you'll rue it."

The old gentleman's heart misgave him, that no effort of his could long retard an event, upon the speedy consummation of which public expectation and Barnaby were bent. This impression, like most others, would have faded and died out in course of time, had not that terrible monitor, Barnaby, mounted guard, so to say, to cherish its existence. Barnaby displayed, in this office, the ingenuity and implacability of a Red Indian. Every action of his, however trifling—his very silence—conveyed either a warning or a reproach to his master.

Presently, this latter's anxious incubation entered a second phase, and one far more creditable to his feelings. Was he justified, even though he could do so, in delaying the union of the young couple so long? This new view of the question was suggested to him one day by Rose's unwonted paleness and somewhat drooping appearance. Could it be the beginning of that shrinking into nothing which Barnaby had prophesied? Rose was as brisk and cherry-cheeked as ever on the morrow, and the fond father laughed himself out of his fears; which, however, did not prevent his relapsing into them, and being overcome by a new qualm the next day, supposing he chanced to see his daughter looking vacantly before her, lost in a deep Rose, contrary to her habit, had become of late addicted to reverie. Ninety-nine out of a hundred fathers in the same predicament would have questioned their daughter, tried to ascertain the state of her feelings, and then determined upon some course of action; but so plain and obvious a method implied a set purpose, and consequently an effort of will, to which his wavering and procrastinating nature could not bring itself.

If he had only some one to consult, by whose counsel he could feel it safe to abide! But among all his friends in Ibella, there was not one to whose judgment he deferred. That most confirmed of blunderers, Barnaby, he utterly dis-

trusted; Don Natale was past giving advice; the ex-Intendente of Ibella was gone. That was a man you might trust with your eyes shut—a man who, for prudence, foresight, and decision, had not his match. While thus bemoaning his isolation, the bright idea flashed through the irresolute gentleman's mind, that the friend he so much missed, was not after all, either bodily or by letter, out of his reach. This friend was at Genoa, and Genoa was not at the end of the world. He would go, by Jove, and pay him a visit—that he would.

This ambitious programme, delayed as usual from day to day, from week to week, dwindled into the modest one of a letter—the writing of which was deferred, of course, to a more convenient hour, begun, left off, taken up again, again discontinued, and at last completed. The answer came by return of post—we

give it literally :-

"MY DEAR FRIEND, - Barnaby is right: marry them at once. I am of opinion that in all dubious cases you would do well to trust Barnaby's instinct, and act upon it—no beagle scents the hare more surely than he does what is right to do. A girl of near twenty too young to be married! Fiddlesticks! If you can do it to-day, don't wait till It will be best for all parto-morrow. ties: for her, whose heart and mind will expand under the influence of a larger mind and heart—for him, whose powers in the hard struggle before him will be increased tenfold by love and happiness -for you, whose old age will be the sooner gladdened by a cluster of lovely little Roses, lisping out 'Grandpapa.' I regret that a world of business prevents me from saying more. I have tried, as you see, to make up for quantity by quality. - In great haste, yours ever affectionately,

This letter was the wand which broke the spell. To read it, and grow as impatient as he had been hitherto slothful to conclude this match was for the recipient one and the same thing. With this intuitive consciousness of his weakness, the Signor Avvocato lost no time in putting between his new resolve and the possible recurrence of fresh hesitations, the unpassable gulf of an accomplished fact—that is, accomplished as far as the case admitted. He ran in hot haste to his daughter, read her what he thought fit of his friend's letter, and asked her point-blank if she had any objection to being married soon—sooner than he had once intended—next June, for instance. Rose, very naturally, was out of breath at such an unexpected question. Indeed, papa must remember that it was neither for him nor for her to fix a time: it was from another quarter that any pressing on that point should come.

"Humbug!" cried papa; "you well know that Vincenzo would not have waited till now to press the point but

out of obedience to me."

"I cannot have him hurried, "insisted Rose. "Oh pray, papa, don't put me in such a false position!" Poor Signor Avvocato! to meet opposition from the very quarter where he looked for support. However, still under the influence of the Genoa letter, he held to his point. He would have the marriage in June, on the First of June, or not at all. Rose might trust her own father, that he would not do anything derogatory to her dignity—she must leave it all to him. Rose was afraid to say more, and the Signor Avvocato, following his own inspiration, wrote thus to Vincenzo:—

"MY DEAR VINCENZO,-I have, in my turn, to ask for a Sanatoria; as to your granting of which, truth to say, I feel very little uneasiness. For reasons of my own, which would be too long to give in writing, and which shall be communicated viva voce, I have taken the liberty of fixing upon the First of next June to be your wedding-day. By that time you will be a doctor in utroque of a full fortnight old. Just send a line by return of post, to let me know whether you approve and ratify the above arrangement; and believe me, my dearest godson, in haste, but very affectionately,

"YOUR GODFATHER."

This letter duly sealed and addressed, word was sent to Barnaby, through Rose, to get the chaise ready and then come to his master. We have forgotten to say that the family had just returned to the palace with the spring; the fluctuations given in outline had taken up the whole of the winter.

"Here's a letter for you to take to the post in Ibella," said the Signor Avvocato; "it must go by to-day's post, mind."

"It shall," said Barnaby, taking the important despatch. "By-the-bye," added he, scratching his head, "suppose I am asked, which I certainly shall be, about the time ?"

"Haven't you got your watch?" interrupted the other, with a little chuckle.

"It isn't that—I mean what time is this blessed match to be, about which everybody is talking and speculating?"

"Ah! the marriage. Well, if anybody asks, say the First of June."

"Not difficult to say," answered Barnaby a little resentfully; "but when the First of June comes, and there is no match—"

"But there will be."

"There will not."

"Will you take a bet on it, Barnaby?"

Barnaby almost poked his nose into his master's face, the better to scan its expression. "Are you in earnest, sir?"

"I am," replied the master; "the letter you have in your hand is to inform Vincenzo of the precise day."

Barnaby looked at the letter spell-bound, made for the door, rushed back, twirled round and round again as if bent on giving himself a vertigo; and, having by these evolutions recovered his lost power of articulation, said at last—"Bravo! you are the worthy son of Signor Pietro, bless his soul!"

"Thank God! for once I have succeeded in giving thee satisfaction, old grumbler," said the Signor Avvocato, good-humouredly; "we'll see how long it lasts. Now look sharp with the

letter."

Barnaby looked sharp, and so did Vincenzo, who came early the next day, the bearer of his own answer. What was its tenor we needn't doubt: and as to the spirit in which it was given and received, that was clearly legible in the traces of deep yet happy emotion, imprinted on the countenances of godfather and godson, when, after being long closeted together, they sallied forth in quest of Rose. The young lady, repeatedly sent for by her father, had not been to be found in doors nor out of doors.

"We will hunt her up, unearth her, though," said the Signor Avvocato in high glee, rolling his ponderous bulk down the stairs with all the alacrity of which he was capable. The chase was neither long nor difficult, thanks to Barnaby, who put them on the right track by dumb show. Rose was inspecting the young mulberry-plants in the nursery-ground-an out-of-the-way place behind the garden—with the close attention of a person meditating a purchase. "Here is the runaway-come along," cried the old gentleman in his merriest tones; and, putting Rose's hand into that of Vincenzo, he added, feelingly, "God bless you, my dear children, as I bless you from my heart! I know she will make thee happy, Vincenzo, and if thou ever makest her shed a tear "

"Oh! I should be a monster if I ever did," protested Vincenzo, energetically.

"Thank thee—thank thee for these blessed words; their warmth does me

good! Adieu."

They stood face to face, hard in hand, alone: and there and then, for the first time, the long-sealed fountain of his love gushed forth in passionate jets. He told her how his whole life had been but a continuous act of adoration: she the sun and joy and pride of the poor infant-peasant, when they strolled the park together—she the secret thought and the consolation of the adolescent's long years of bondage in the seminary she the strength of the youth struggling hard for university honours! Ah! but for her image to prop him up, but for her approval to deserve, how many times would he not have sunk under the trial! She his all in all in the past, in the present, in the future!

This he told her as they moved on, still hand in hand, under the blue canopy of heaven, amid the thousand subdued voices of Nature awakening under the breath of the early spring-this and much more, which we need not Lovers are terrible hands at repeat. idealizing. Had Rose been a saint descended from on high to lift him up-a common mortal—to share half of her celestial bliss, he could not have spoken and felt more highly of her, more humbly of himself. True love is always humble, and then his was saturated with gratitude: do what he would, could he ever pay off the balance of the immense debt he owed to father and daughter?

Sweet must be the odour of the incense burned at one's feet by the person one loves, for Rose to accept of Vincenzo's without protest. She did though, and looked on serenely calm and happy as he spoke, just as a saint might do in receiving homage at the hands of a

common mortal.

"Poor is the lot," pursued Vincenzo,
"which I can offer you, my Rose—so poor, indeed, to my wishes and to your deserts, that I should scarcely dare to ask you to share it, did not I feel so immensely rich in love, tenderness, and devotion—oh! so rich, as to feel sure of making up to you for all its short-comings. I know, for instance, how painful will prove the separation from your father, though only for a time."

"Oh! painful beyond what I can express," exclaimed Rose; "but cannot it be averted? Is it absolutely necessary?"

"Absolutely, I grieve to say," answered Vincenzo. "You know that when I get my degree, I am to enter, as agreed upon with your father, on an official situation under Government; and from that moment I shall be no longer my own master, but entirely under the orders of the minister, my patron."

"That I understand very well," said Rose, "if you accept of a situation: but what necessity is there for your seeking

any ?"

"What necessity, love? But I must work; every one must work, and make himself useful in this world."

"Papa does not work," objected Rose.
"Yes, papa does to a certain extent,

though now nearing that age at which man is entitled to rest. Papa sees to the management of his estates, gives legal advice to those who ask it from him, and then his leisure hours he devotes to the study of music—he is far from idle, you see."

"Well, I allow all that, but could you not help papa, and find besides some useful occupation for yourself

here ?"

"To divide with your father the tasks to which he is quite equal alone, would be the same on my part as to accept of a sinecure. The little I could do for him would fall short indeed of my powers of activity, and also of my legitimate ambition."

"Ah! ambition," said Rose, "is the

natural enemy of love."

"Not in me—not in me," protested Vincenzo with warmth; "my ambition is part of my love. I possess none of those advantages which men most prize, neither birth nor fortune. I am a mere cypher, and I must myself give this cypher a value. The name you condescend to wear must be an honoured one, and I will make it so."

"And if I am content with you as you are, and don't care for anything

else ?"

"Bless you, sweet soul! for saying so!" cried the enraptured lover, kissing her hand most passionately; "but even your gentle wishes cannot release me from the duty I owe to you, to your father, to myself, to the world. Would you have it said of me, with any appearance of reason, that I have sought a rich heiress in order to live in plenty and idleness?"

"Oh! who would ever be so wicked

as to say so?"

"How little you know of the world, Rose dear! Who would say so?—the envious, the scandal-mongers, and their name is legion. No, no, darling of my soul; let me do what I think right, and aid me to do it. Bad as a separation is, do not allow your imagination to picture it worse than it is. Not for the world, not for my eternal happiness, would I urge upon you a sacrifice too hard for

you to bear. Wherever we are, you see, we shall always be within easy reach of Rumelli. Piedmont is but a nutshell, and covered all over with railroads. Then, you know, I am to have regular leave of absence; and once a year, at least, we shall be able to come and stay some time with your father: he, on his side, will pay us occasional visits, and take you back with him whenever you choose. What do you say, Rose?"

The words were so sweetly spoken, that they sounded like a caress. He was seated by her side in the belvedere, both her hands in his, his black eyes plunging into her violet ones. There was an ineffable charm in the gentle earnestness of his tones and looks. Rose felt conquered, if not persuaded. "If it cannot be helped," she said at last, "why, then, it must be as you

wish."

"Thank you—thank you!" said Vincenzo, sinking his lips into the plump rosy hands his own held willing prisoners—then looking up again into her eyes, he added: "It is so sweet to ask so gracious a giver, that I am greatly tempted to present another petition."

"And what may that be?" asked

Rose.

"Simply to humour a love-whim of mine. There exists a custom in England which I much admire, and would fain adopt. A newly-married couple there, almost as soon as the ceremony is over, disappear from all gaze profane, and start away, alone, on what is termed their wedding-tour. Let us do the same. Let me enfold you in the cloud of my love, and have you all to myself for a little while."

"I would willingly say yes," said

Rose; "but perhaps papa-"

"Your father is already my confident, and will not object if you do not." "Well then, I do not; where shall

we go?"

"To Turin first—then to Genoa, to look at the sea, if you like."

Oh yes, that will be charming."

"Then to Florence — 'Firenze la bella!'" continued Vincenzo,

"Shall we go to Rome?" asked Rose.
"Rome is very, very far," objected

Vincenzo.

Oh! do let us go to Rome—I would rather go there than anywhere. I do so long to kiss the Pope's foot, and go up the Scala Santa on my knees."

"But, indeed, Rome is too far," again observed Vincenzo, "and then there's the malaria in the summer

months."

"Never mind the malaria."

"But I must mind it, dear. Only think, if you were to catch the fever—the mere idea makes me shudder. Your father would never forgive me, and with reason; nor could I ever forgive myself. Rome is quite out of the question for the present. We must put off our journey thither to some future winter."

"What a pity!" exclaimed Rose.

The conversation was brought to a close by a series of angry shouts from Barnaby, who came to summon them to dinner. Barnaby cried shame on them for keeping the Signor Padrone waiting: they knew the Signor Padrone was so particular as to his meals. Barnaby was too happy not to fret and fume at something or somebody.

Vincenzo started for Turin by the earliest train on the morrow.

CHAPTER XXVIII.

A HAPPY PAIR.

Towards the middle of May in the year 1854, Vincenzo went through his last examination in dashing style—and scarcely a fortnight afterwards, that is, on the First of June, he led his betrothed to the altar.

The marriage was celebrated with all the pomp and circumstance of which a marriage admits. Turin sent no less than seven representatives to the ceremony, among them Signor Onofrio; and all the big-wigs of Ibella, with the exception of the Signor Intendente, who pleaded indisposition, were present; and so was Rumelli en masse, of course. Vincenzo could have well dispensed with nine-tenths of all this éclat and

publicity-they jarred with his quiet and simple tastes. But the Signor Avvocato had set his heart on doing the thing grandly; and then Rose was so pleased with all the arrangements, that the bridegroom could not but be so for her sake. Rose was splendid in natural beauty as in adornment-her toilette was dazzling-connoisseurs said it might have suited a princess. ill-repressed murmur of admiration followed her steps, as, leaning on her father's arm, she walked up the nave of the parish church to the high altar, the point of attraction of all eyes. The Signor Avvocato wore, for the first time, the Star of St. Maurice and Lazare in diamonds, ordered expressly for the occasion.

The service was read, and the benediction given to the young couple by old Don Natale, who further attempted to deliver a little speech of congratulation—(the third he had addressed to Vincenzo in public, the first dating twelve years back). But, as everybody expected, he broke down most pitiably at the second sentence—a failure which proved, after all, a success, inasmuch as the part of the congregation nearest to him, infected by his melting mood, burst into tears and sobs. Conspicuous among the chorus of weepers and sobbers stood Barnaby-Barnaby, as black as a drop of ink in his new suit of sables, and white cravat: Barnaby, whose naturally distorted features had reached, under the pressure of emotion, the beau ideal of ugliness. Extremes meet, and, next to the bride, Barnaby was the great attraction of the day. Impossible to look at him in his black coat without laughing outright,

At one o'clock P.M. fifty-one guests sat down to table in the large hall on the ground floor. Two bands of music, that of Rumelli and Ibella, were in attendance outside, and played during the repast. We say nothing of the fare—it consisted of every delicacy that money can buy, and culinary science improve; and as to wines, the cellar of the palace was celebrated throughout the province. The dinner went through

all the legitimate stages of crescendo, from the subdued buzz during the soup to the simultaneous explosion of every

voice at the dessert. When the entertainment had reached this climax, the health of the sposi having been drunk and re-drunk, and drunk again sine fine, the bridegroom whispered to the bride, and cautiously withdrew. Rose, on the first convenient opportunity, followed his example, and went, unobserved, to change her bridal attire for a travelling dress; she then joined Vincenzo and Onofrio, who were waiting for her in a dark passage leading to a door opening out into the back premises. At this door was stationed a spring cart, which had served in the morning to bring from Ibella a load of elegantly elaborated edifices of pastry and confectionary, fruits of all kinds, and ices. It had an awning of thick striped canvas, and curtains of the same stuff closed it in all around, in order to protect the delicacies it contained from the heat of the sun and the dust of the roads. Into this vehicle Onofrio handed Rose, then Vincenzo, and, carefully closing the curtains, bid them good-bye.

The driver led the horse by the bridle, and the cart jogged away unobserved through the avenue, and down the road to the turning below Rose's belvedere. Here was waiting the Signor Avvocato's chariot and pair, with Giuseppe as coachman. Seizing a favourable moment, when there was no one in sight, the newly-married couple alighted, and hurried into the carriage. They were both so nervous and afraid of detection, that, but for Giuseppe, they would not have seen Barnaby waving a farewell to them from the belvedere, and weeping like a mermaid.

The scheme of the cart was of Vincenzo's own concocting, and he was not a little proud of it. Had it been a question of elopement, he could not have fenced it in with a thicker hedge of precaution and mystery. Nor had he been a whit too careful, if we take into consideration the amount of opposition which a course so contrary to all precedent could not have failed to meet

with from the bridal party, had it transpired. Rose lent herself to Vincenzo's whim with infinite complaisance and good humour. They reached the station in full time for the last train, and an hour before midnight were safely lodged at the Hotel de Londres, at Turin, where the bride's luggage, thanks to Vincenzo's forethought, had preceded them.

Besides the natural eagerness, common to every lover under the sun, to have his beloved all to himself, Vincenzo had another motive for wishing to remove Rose from small local influences, and introduce her to a larger and broader current of ideas and feelings than could be found at Rumelli. Vincenzo had never shut his eyes to a fact, of which he had of late had ample confirmation—we mean the narrowness and lukewarmness of Rose's patriotism; and to enlarge and warm it, to bring it nearer to the level of his own, he trusted, rather than to any definite teaching of his, to the action of those thousand mysterious imponderables, which pervade the air of a large city. and constitute, as it were, the atmosphere of civilization. Not that Vincenzo wanted to make his wife a political character; all that he wished was, that she should be capable of understanding and sympathizing with a political man. Until a communion of feeling on this cardinal point was established between them, he felt that he could not call her quite his own. The trip to Florence had been devised to forward this purpose, to the attainment of which he anticipated no difficulty. His estimate of Rose's docility and good sense was, as we know, high. And what place was better calculated to open her mind and heart to the consciousness and pride of the Italian sentiment than Florence, the beautiful and gentile, the Athens of Italy, the mother of Dante and Michael Angelo-Florence, the incarnation of Italian genius?

A better assorted or happier-looking pair seldom graced the arcades of Via Po, or the alleys of the public gardens; he, a head taller than she, fondly bending towards her his pale face, full of distinction and serene thought; she fondly lifting hers, all dimples, and lilies, and roses, up to his. Passers-by turned round to steal another peep of them; Vincenzo's fellow-students raised their eyebrows, and murmured as they lounged by, "Lucky dog!" Rose was lost in admiration of all she saw; the impression made on her by the long, wide, regular streets, the enormous squares, the mighty river, the affluence of people, the splendid shops, was the more interesting to Vincenzo, as it was a reproduction of that he had himself

received six years ago.

They spent only a few days in Turin, but they were days well employed. Vincenzo played his part of cicerone conscientiously-not a sight worth seeing that he did not take her to see. Both Houses of Parliament, of course, The Subalpine were of the number. Parliament, in 1854, was a miniature likeness of the Italian Parliament of 1862. Almost all the States of Italy, Rome and Naples not excepted, had representatives there; men who had, many of them, tasted the salt bread of exile, been buried alive in the tombs of the Spielberg and the Segrete of Naples men who had suffered in various ways in the name and for the sake of Italy, who were glad and proud of having done so, and were ready to do so again. Vincenzo pointed out some of these to Rose, and gave her a sketch of their Onofrio, himself one of this lives. noble band, introduced a few of these fellow-sufferers of his to the young couple, who heard from them stories, modestly and unaffectedly told, of narrow escapes, and hardships, and cruelties; of double irons worn and dragged for years and years; of heavy coupling chains never removed night or day.

The minister, Vincenzo's patron, paid the young bride a visit, and after saying many things very pleasant for her to hear, ended by giving her a smiling caution against any delusive hope she might harbour of having her husband all to herself for very long, There was another lady to whom Vincenzo also owed allegiance, and who would put in her claim to it within three months. Signora Candia need not blush so; she must be of a jealous disposition indeed, if she was jealous of "the country," for that was the lady, and no other, to whom he had alluded, and in whose service Vincenzo was pledged from the

first of September next.

Genoa was their next stage. The palaces and the orange-trees of "La Superba" did not find much favour with She missed the space and the symmetry of lines which had struck her so much at Turin; but the sea made up to her for all deficiencies. They had rooms in one of the many hotels which overlook the port, and were never wearied of contemplating the new and ever-changing spectacle under their eyes. Rose declared she was in love with the sea. Vincenzo. too, was in love with it, but in a different way from hers. There mingled with his admiration of its versicoloured loveliness and majestically serene repose a sense of poetical awe of its mysterious immensity, and virtual uncontrollable force, when aroused to fury; that fury to which dykes and piers are like mounds of sand, and three-deckers cockleshells. Whereas unimaginative Rose saw it hemmed in by the horizon, saw it beautifully smooth like a mirror, as it just then was; could not conceive it otherwise, and longed to feel herself rocked on its bosom. Why should they not go to Leghorn by steam, and thus escape the dust of the roads? cenzo emptied his quiver of classical arrows at mare infidum, but to no purpose; she laughed at Horace and his triplex robur with the perfect assurance of one who knows nothing of the sea, and just as much of Latin.

Vincenzo had obvious reasons for not leaving Genoa without visiting a patriotic memento which forms, and justly so, the pride of all Genoese, and that in particular of the populous and popular quarter of Portoria, within whose precincts it is by right situated. It consists of a slab of marble, commemorative of the event that follows, and which occurred in 1746. It would take too

long to say what concatenation of circumstances had led to Genoa being abandoned by her powerful allies, France and Spain, and left to the tender mercies of Austria. Suffice it to state that the territory of the republic, and its capital, were in the occupation of thirty thousand Austrians. A squad of these soldiers, towards dusk on the 5th of December, 1746, were dragging through Portoria a large mortar, when the pavement gave way under the weight, and the mortar buried itself in the ground. Unable to raise it by their own efforts, the escort demanded the assistance of the neighbouring tradespeople and of the occasional passers-by, but to no purpose; seeing which the corporal had recourse to the Austrian argument, par excellence, Thereupon a lad of fourteen, the cane. an apprentice dyer, nicknamed Balilla, hurled a stone at the corporal's head, which knocked him over. In the scuffle that ensued one soldier was killed and seven badly wounded; the rest fled, to return backed by several hundreds of their comrades, who had, however, to beat a precipitate retreat from the stones, tiles, articles of furniture, boiling pitch and oil, thrown down upon them from This was the the roofs and windows. prologue to a fierce struggle, which extended over six days-from the 5th to the 10th of December-and which ended in the total rout and expulsion of the Austrians, with a loss of 1,000 slain and 7,000 taken prisoners. If ever there was a popular victory, this was one, fought and won as it was solely by the popular classes, who had not only a numerous, well-disciplined, well-fortified army to cope with, but the ill-will of their own Government to neutralize, a counter-government, head-quarters, leaders, arms, commissariat, &c. to improvise for themselves, and public order to maintain. To carry out this last purpose gallows were erected in the square of the Annunziata for the immediate accommodation of thieves caught in flagranti. And well might Giovanni Carbone, a young man of twenty-two, and one of the bravest combatants of the six days—well might he say to the Doge and Senate, when consigning to them the rescued keys of the city, "Here are the keys which your most serene lordships yielded so easily to the enemy; take care to guard them better in future, for we have redeemed them at the cost of our blood."

They went by sea after all—between the wisdom of Horace and the pouting of a cherry lip, what man in love ever hesitated !- and a delightful passage it was: not a breath of wind, scarcely a ripple on the water. Who so happy and proud as the fair prophetess? Leghorn, after Genoa, had but little interest for our young tourists; so they pushed on to Pisa. They took only a peep of the fine old city, however, so impatient was Vincenzo to reach Florence. Rose was rather attracted by Pisa, particularly by the leaning tower; but what most tickled her fancy was a herd of camels which she saw in the environs, at the farm of San Rossore. They haunted her; she had never seen a camel before, except in a picture.

But her first impression of Florence was one of disappointment, owing partly to Vincenzo's imprudence in raising her expectations too high, and still more, perhaps, to a change of weather. Their arrival was saluted by a perfect downpour of rain. Even the City of Flowers could not look otherwise than dingy and disconsolate under a heavy shower. It was short, as summer storms are; and, only a few hours later, when the married lovers went out for a walk, the sun shone gloriously, the birds sung merrily in the groves of Boboli, a delicious freshness pervaded the air. This magic change, however, wholly failed to dissipate the first unfavourable impression received by Vincenzo's wife. Rose was most tenacious of first impressions.

Vincenzo proceeded methodically, as his wont was—he devoted the first days to a general survey of the town, so as to make himself familiar with its configuration and distribution; he then took an Artaria, the Italian Murray, and began his rounds. We shall not follow him; the task of cicerone does not belong to our department; the description would

be tedious to those who know anything of Florence, and entirely useless for those who do not. We will only say that which will be no novelty to anybody, namely, that our young couple met at every step with memories, names, and works, the mere mention of which thrills the hearts of five-and-twenty millions of Italians with pride and grateful reverence. Out of these noble names, and memories, and works, was to be elicited the spark which was to warm Vincenzo's Galatea into a new Young Candia had chosen for head-quarters a quiet hotel not far from the church of Santa Croce, and rare was the day when, either going to or returning from his sight-seeing expeditions, he did not enter the noble pile and seek for inspirations at the tombs of Machiavelli, Galileo, Alfieri, Michael Angelo, and Dante. Vincenzo's system of tuition was simple and easy: he chose for his theme the most striking event suggested by the sights of the day—as, for instance, Pier Capponi's superb answer to Charles VIII., Ferruccio's death, the expulsion of the Duke of Athens, or such like; gave Rose a summary of it himself, and then in the evening read her an account of the circumstance as told by Villani or Machiavelli. Or, perhaps, taking his cue from a visit to the apartment of the Priori in Palazzo Vecchio, or to the hill of San Miniato, he would impress on Rose, and illustrate by apt examples, the great love of Dante and Michael Angelo for their country. (Everybody knows that Dante, previous to his exile, was one of the Priori of Florence, and that the fortress of San Miniato was strengthened with new ramparts and bastions by Buonarroti himself in the year 1529). Oftener still Vincenzo contented himself with reading to her such passages of the "Divina Commedia," Petrarca's political "Canzoni," Alfieri's tragedies, or Foscolo's "Sepoleri," as most forcibly embodied the sentiments he wished to instil into

All this Vincenzo did gently, discreetly, by driblets, be it understood.

Of all things, he hated pedantry; he

knew also how much Rose was equal to; and then he was in love—three infallible preservatives against becoming a bore. Even had he any disposition to become one, he would have lacked the time, so full was the share they took of the diversions and amusements that Florence afforded. The cool hours of the evening saw them oftener taking ices at the Cascine or at Boboli, at some of the theatres, or at a conversazione, than studying the history of their country, or

of its great men, at home.

Rose listened to him and to his reading often with pleasure, sometimes with real interest, always with docility and an evident wish to humour him-never with an appearance of anything like a patriotic fibre vibrating within her. Far from finding fault with her for this, Vincenzo discovered plenty of reasons for her justification—her want of education, the narrow atmosphere in which she had lived, and so on—and he trusted for a change to the action of time. He felt grateful to her for the goodwill she evinced, for her invariably charming temper, for the easy way with which she put up with many little disagreeables inseparable from a stay in an hotel -grateful for the spirit of order she showed. Rose, according to the express request of her husband, was pursebearer, cashier, accountant; and it was a real pleasure to him to see the method, the clearness, the neatness with which she kept her accounts. On another also, and, in Vincenzo's eyes, capital point, she fully deserved, and he gave her, all praise: it was the simplicity of her attire. Rose, in spite of example, gave in to none of the eccentricities of fashion.

Late on a sultry evening they were sitting on the terrace, which was on the roof of the house. Florence, bathed in the mellow light of the moon, had a melancholy charm of its own, which went to Vincenzo's heart, and brought unconscious tears to his eyes. And, as he looked at it, and evoked its memories, his soul overflowed with enthusiasm, and he fell to indulging in a beautiful vision of the future, which came forth clothed in words of fire. He pictured

an Italy independent, free, united pictured the revival of its genius, its arts, its commerce, the increased splendour of its hundred cities....

"With the Pope at its head," interrupted Rose, with a flash of enthusiasm quite new in her. Vincenzo looked at her, as if suddenly awakened, and knit his brows; but there was no tinge of impatience or displeasure in his answer, "Why the Pope, dear? Italy wants at its head some one capable and willing to draw the sword against its enemies; and the Pope cannot. He refused, you know, to declare war to Austria."

"Yet," persisted Rose, "did not Gioberti advocate the Pope's claims to

be chief in Italy?"

"True; but he lived long enough to see his error, and to recant it in his last work. If there is ever to be an Italy united under one king, the Re-galantuomo is that king by right."

"Oh! Victor Emmanuel!" exclaimed Rose; "how can a country ever prosper under a king who has no religion?"

"Allow me to say, Rose dear, that your speech is uncharitable and . . . inconsiderate. How do you know, and what has Victor Emmanuel done to justify your assertion, that he has no religion?"

"Do you ask what he has done?"
was Rose's warm rejoinder; "have you
forgotten that he has sanctioned the

law against the priests?"

"Law against the priests!" repeated Vincenzo, his eyes wide with amazement. You must have dreamed of one, assuredly, my dear Rose: there never has been a law passed against the priests, nor so much as thought of."

"You are unfair, Vincenzo; you know very well what I mean—the Law Siccardi—the law to commemorate the passing of which a column was erected

by public subscription."

"Do you know," inquired Vincenzo,
"the provisions of the law you allude
to?" Rose had, apparently, her reasons
for evading the question, for, instead of
answering it, she said, "I know the
clergy regarded it as a spoliation, and
resented it as an affront."

"True; but that only proves that they were angry, not that they were right in their appreciation of it. The clergy were not, could not be expected to be, impartial in their own cause."

"Do you mean to say that such men as Don Natale or Padre Terenziano could be influenced in what they said by

mere partisanship?"

"Most assuredly they could, and were so, though, I have no doubt, in perfect good faith. It is difficult for the best of men to have a long-possessed privilege taken from them, and not feel their withers wrung. I myself, you see, only an ex-seminarist, one who had shrunk from being a priest, felt as a partisan in this very case." And he went on to tell her of his instinctive repugnance to the bill, of his attendance in Parliament to hear it discussed, of the light that had gradually stolen upon him, and at last of his entire concurrence in the principle and dispositions of the law.

That Rose was not convinced was clearly implied by the tone in which she said: "Well, that's your way of

thinking."

"It ought to be yours also, if mine is right."

"And if it is not?" retorted Rose.

"If it is not," said Vincenzo, "convert me to yours. I ask for nothing better."

"I have no pretensions to converting

you," said Rose, drily.

"Excuse me for saying that in that you are wrong, Rose. There can be but one legitimate way of thinking, as there is but one truth; and, if you believe me to be in error, it must be your wish, as it is your duty, to put me right; for how can we be united in the spirit, as we are in the flesh, if you do not?"

This appeal remained unanswered. Rose became all at once aware that it was late, and that she was tired, and left the terrace. For the first time since his marriage, Vincenzo went to bed with anything but a light heart, and he spent part of the night in upbraiding himself with having been

B B 2

harsh,—if not positively harsh, too stringent; at all events, he might have couched his remarks and arguments in

gentler words.

On the morrow, there was a cloud on Rose's brow, the first that had overshadowed the screnity of her honeymoon. What lover worthy the name can see a cloud on the beloved features and not do his best to conjure it away? This Vincenzo did, and successfully, by redoubling all those little tendernesses and endearments, which say so point-

edly in their mute language, "All that I care for is to be at peace with you." A dangerous way of mending little splits in the present, at the expense of large ones in the future. The reconciliation, in fact, rested upon a misconception. Vincenzo had been making amends for a real or supposed want of form in his strictures of the night before, whereas Rose had accepted his atonement as a recantation of their substance.

To be continued.

THE CHEMISTRY OF THE SEA.

BY DR. T. L. PHIPSON, F.C.S. ETC.

That sea-water differs materially from spring-water or rain-water, on account of the number and quantity of various salts and organic substances that it contains, is well known. It has often been asked, Why do we find so much salt in the water of the sea? It might also be inquired why we find so much salt in the blood: if dried blood be calcined, the ash it leaves contains more than half its weight of sea-salt. Instead of raplying to any such random queries, let us proceed to bring forward facts which will answer for themselves.

At the present day we are acquainted, more or less, with sixty-two chemical elements, or simple substances which cannot be decomposed; and of these sixty-two elements exactly one-half, or thirty-one, have been met with in seawater. They may be enumerated as follows: -Oxygen: hydrogen: azote in ammonia; carbon in carbonic acid; chlorine, bromine, iodine in fuci; fluorine in combination with calcium; sulphur as sulphuric acid; phosphorus as phosphoric acid; silicium as silica; boron as boracic acid. discovered both in sea-water and sea-weeds; silver in pocillopora alcicornis; copper, very frequent in animals and plants of the sea; lead, very frequent in marine organisms; zinc, principally in sea-plants; cobalt and nickel in sea-plants; iron, manganese, aluminium, magnesium, calcium, strontium, barium, the latter two as sulphates in fucoid plants; sodium, and potassium. These twenty-seven elements were ascertained by Dr. Forchhammer to be present in sea-water; the presence of the other four—viz. lithium, cosium, rubidium, and arsenic—has been shown by other chemists.

Of these substances only a few occur in such quantity that their determination has any notable influence on the quantitative analysis of sea-water—namely, chlorine, sulphuric acid, magnesia, lime, potash, and soda. Many seem to be dissolved by means of carbonic acid, and are found in the residue left when sea-water is evaporated and the salts re-dissolved by water.

The saline matter of the sea occurs in pretty nearly the same proportion at whatever latitude the sample examined be taken, provided it be taken from the open ocean: it amounts to nearly 3.5 per cent. or in 100 lbs. of sea-water 3½ lbs. of saline matter, principally common salt. But the mean quantity of saline matter in the different seas varies in proximity to the coasts, or with special meteorological conditions. Thus, in the North Sea, the mean quantity of solid matter is 3.28 per cent.; in the Kattegat and Sound, 1.51; in the Baltic, 0.48, or about a half per cent.; in the

Mediterranean, 3.75; in the Black Sea, 1.58; and in the Carribean Sea, 3.61. In the equatorial regions there is a high percentage of saline matter, on account of the large quantity of water evaporated daily by the heat of the sun; thus, the mean quantity of salts at the equator is 3.62, whilst in the Polar Sea it is only 3.35.

The more salt the water contains the denser it is, and consequently a somewhat larger percentage of saline matter is found at great depths; and, where this is not the case, it proves the existence of a source of fresh water, or of a

submarine current.

A pond of fresh water exists in the Gulf of Xagua, off the southern coast of Cuba: at about three miles from the coast the fresh water gurgles up in the open sea as if from a spring. This is probably well known to navigators who frequent these regions, for more than once, when a ship has passed without touching at Cuba, the crew have renewed their supply of fresh water at this wonderful fountain in the briny ocean. Something similar has been observed near Goa, on the western coast of India, and in the Mediterranean, not far distant from Marseilles, where fresh water rises out of the strata at the bottom of the sea, but does not rush up to the surface.

Interior seas, such as the Baltic, the Black Sea, Baikal Lake, &c. contain much less saline matter than the ocean, as may be seen, for the two former, in the figures given above. The Mediterranean is an exception to this rule, for not only do the hot winds from Africa cause rapid evaporation from its surface, but it receives constantly, by the straits of Gibraltar, new supplies of salt-water, which replaces that lost by evaporation. Moreover, when this sea is compared with the Baltic, we find a double current at the entrance of the Baltic as well as in the straits of Gibraltar; but it is the under current that runs out of, and the surface current that runs into, the Mediterranean, whereas the under current of the Baltic is the entering one.

The reason why many interior seas

contain less saline matter than the ocean is palpable. These seas, or inland lakes, have emissaries, or streams which flow from them, depriving them of salt-water, whilst the water lost in this way is replaced by rains or by freshwater springs from the mountains. is, therefore, evident that these inland. seas must go on losing salts, until they arrive at the state of ordinary fresh lake-water. And such is, indeed, the case, as we have numerous examples toshow. But what becomes of the plants. and animals born and bred in the saltwater?—we find them flourishing in the now fresh-water lakes! This is what has happened to Baikal Lake, situated in the southern district of Siberia: the powerful stream Angara has gradually carried away its salt, and this vast area of water has become fresh. But its animals and plants remain as before: we find shoals of herrings, which are caught and salted like those of the European seas, and form an important branch of commerce there. There we have also seals exactly similar to those of the Scandinavian and Greenland seas -and which M. Babinet wishes to see brought over and reared in the Bois de Boulogne-sponges and corals of very good quality, and several other marino organisms, flourishing in the fresh water. Again, 400 miles to the east of Baikal, we find seals in the small, now freshwater lake of Oron, which is only a few miles in circumference. The change from salt water to fresh water has been so gradual, that these marine animals do not appear to have suffered by it.

But we have now to examine also the reverse of this proposition. Here we see marine plants and animals alive and prospering, whilst the salt decreases gradually until the water becomes fresh, the phenomenon being caused by the streams or outlets which flow from the lakes. But in other inland seas the reverse of this occurs; as, for instance, Lake Asphaltites, which receives the waters of the Jordan, and several other streams, but which has no outlet; the excess of water being carried off sorapidly by evaporation, that the lake

never overflows, and the salts accumulate constantly. Here the quantity of salt accumulated is already so great (upwards of 20 per cent., or 20 lbs. in every 100 lbs. of water), that not only is the density (1.24) of the water greater than that of any other-save, perhaps, the Great Salt Lake in the Mormon district—but no plant or animal can live in or near it; hence it is sometimes known as the Dead Sea. It is peculiarly situated, being completely separated from, though so near to, the Mediterranean, by a high chain of mountains. Its surface lies one thousand three hundred and twelve feet below that of the Mediterranean; and it is, therefore, by far the deepest known fissure on the earth's surface.

In the other hemisphere we have a parallel example, in the Great Salt Lake of Upper California. This lake, like Asphaltites, has no outlet, but receives the water of a considerable river, rising in the Rocky Mountains, on its northern side, and two or more small streams from the south. Hence the water has become so salt, that no animal or plant can live in it; it is also remarkable for its great transparency. It contains 27 per cent. of salt; that is, 27 lbs. of salt for every 100 lbs. of water.

The Caspian Sea, one of the greatest enigmas of physical geography, instead of an emissary like the Angara river, which flows from Baikal Lake, receives the waters of the Volga, the Ural, the Terek, the Kur, the Aras, &c.; and, though it has no apparent outlet, its waters are less salt than the ocean. This proves that there must exist a subterranean outlet. The waters of the Caspian are very shallow along the coast, even to the distance of several miles from the shore, where the depth is scarcely twelve feet. But towards the centre it varies from 120 feet to 300 feet. and in the middle no sounding could be taken with a line 2,800 feet long. From the uniformity of the soundings within certain breadths, and their somewhat sudden increase, the bed of the Caspian appears to descend by terraces. And, though it appears evident that there exists no communication between the Black Sea and the Caspian, because the level of the latter is 831 feet below that of the former, it should be remembered that this depression is by no means constant-sometimes increasing, sometimes diminishing, fluctuating periodically and irregularly-so that there may in reality exist a subterranean channel of communication; besides, it has been asserted that barrels left floating on the Caspian were afterwards seen on the Black Sea. It is, however, quite possible that the Caspian communicates with the active volcano Demavend, which lies at a comparatively short distance to the south-west of it.

The nauseous taste of sea-water is derived from the various salts it holds in solution; but this liquid contains also myriads of animalcules and microscopic vegetable organisms. Putting aside the organic matter, an analysis of sea-water taken in the German Ocean has given for 100 lbs. of water—chloride of sodium (culinary salt), 2.66 lbs.; chloride of magnesium, 0.51, with traces of bromide of magnesium; sulphate of soda, 0.46; chloride of calcium, 0.12, with traces of iodide of potassium, silica, &c.—total, 3.76 lbs.

The specific gravity of sea-water varies of course with the proportion of salts and the degree of heat it receives from the sun, or by the intermixture of currents of various temperatures; but in our own latitudes it is about 1 028; that is, a given volume of pure distilled water weighing 1,000 grains, the same volume of sea-water weighs 1,028 grains.

Many useful substances are daily extracted from the sea for the use of man, among which we may mention pure water for the use of ships, salt, iodine, bromine, &c.

Many attempts have been made to purify sea-water in order to render it potable, not only for supplying ships, but for the use of maritime towns and villages, where pump-water is often

¹ It would be interesting to ascertain whether certain infusoria, or inferior alga, which inhabit mineral springs, do not exist here.

brackish, and where the inhabitants are frequently obliged to have recourse to rain-water. Now, when sea-water is submitted to congelation, it abandons its salt almost completely—a fact which appears to have been discovered many years ago by Chevalier Lorgna, who found that a mixture of three parts of pounded ice and two parts of common salt produced a cold of about 4° below the zero of Fahrenheit thermometer, and that such a mixture caused seawater to freeze rapidly. A mixture of various chemical salts in proper proportions produces a similar degree of cold. Lately the cold produced by the evaporation of ether has been proposed for the same purpose. The purification is complete if the ice thus formed be melted and frozen again. In the Polar regions the ice formed from salt-water is more or less opaque, except it be in very small pieces, when it transmits light of a blueish green shade. When melted it produces sometimes perfectly fresh water, and at other times water slightly brackish. The fresh-water ice resulting from rain or melted snow, as seen floating in the Arctic seas, is distinguished from the salt-water ice by its black appearance, especially when in small pieces, and by its transparency when removed from the water into the air. Its transparency is so great, when compared with sea-ice, that Dr. Scoresby used to amuse his sailors by cutting large lenses out of this fresh-water ice and using them as burning-glasses to light the men's pipes. Their astonishment was increased by observing that the ice did not melt, while the solar rays emerging from it were so hot that the hand could not be kept more than a second or two at the focus.

Dr. Lind, of Portsmouth, was the first to purify sea-water by simple distillation: this was about the year 1740, after many unsuccessful attempts had been made with other means. Several experimenters afterwards devised apparatus by which this distillation might be carried on economically, and the distilled water might be made to dissolve its proper quantity of atmospheric air, without which it is extremely insipid. Of the

various apparatus, that invented a few years ago by Dr. Normanby appears to have been generally adopted. An ordinary-sized apparatus furnishes about two pints of fresh aerated water per minute, and 1 lb. of coals will yield about 10 lbs. of drinking water. I once made an attempt to purify sea-water by the aid of an electric current, destined to decompose and extract the salts, the water being afterwards filtered through charcoal. By this means carbonate of soda might be procured at the same time.

Of all the products which the ocean furnishes to supply the wants of man, culinary salt (chloride of sodium) is, perhaps, the most important. Neither plants nor animals can exist if they be entirely deprived of salt, and the presence of a considerable amount of this substance as an essential constituent of the blood I have already alluded to. In almost every country there exist more or less extensive mines of salt, identical with that extracted from seawater. In Europe, the most celebrated mines of rock-salt are those which extend from Wielicska and Bochnia, near Cracow, away into Moldavia: they were discovered in the middle of the thirteenth century, in the reign of Boleslas V., King of Poland, and have proved a source of inexhaustible treasure ever since that period. Six hundred millions of tons of salt have been extracted from these mines since they began to be worked. In the south of France the water of the sea is conducted into quadrangular spaces called "marais salants," where it is submitted to evaporation, and the impure salt thus obtained sells at about 11d. per 100 lbs.

We have seen above that sea-water abandons its salt whilst freezing: this phenomenon is turned to account at Bergen, above 190 miles W.N.W. of Christiania in Norway, and about the same latitude as the Shetland Isles. Taking advantage of the severe climate, they cause the sea-water to freeze, and, removing the ice, evaporate the salt liquid which remains.

In former times all the carbonate of soda used in the arts and manufactures

was obtained from the ashes of sea-weeds and plants of the sea-shore. For some years, however, this useful product has been almost exclusively obtained from sea-salt, for which purpose the latter is heated with sulphuric acid, which converts it into sulphate of soda and hydrochloric acid. The sulphate of soda is partly sold to the glass manufacturers, but the greater portion is converted into carbonate of soda, by heating it with coal and lime; whilst the hydrochloric acid is partly sold as such, and the rest converted into bleaching powder, &c. This series of operations constitutes a most important branch of chemical manufacture in the present day.

When we consider the physiological importance of salt, both for plants and animals, its various uses, and the starting-point it constitutes for innumerable chemical manufactures, we cannot help remarking that the heavy taxation imposed upon this article by the French Government is one of the greatest poli-

tical blunders ever made.

The water of the evaporating spaces where sea-salt is obtained is often observed to be coloured yellowish, or oftener still of a bright red colour. The same red colouration is remarked in rock-salt obtained from mines far distant from the sea. This red colouring matter has been attentively investigated by several eminent naturalists. found to be owing to the presence of a vast number of microscopic plants, belonging to the genus Protococcus. water of the sea is frequently seen coloured for miles and miles by the same minute beings. Whilst Protococcus nivalis covers here and there the snow on the Alps, and other high mountains, with a layer of brick-red organic matter, so Protococcus atlanticus colours the water of the Atlantic Ocean, forming red bands or zones upon the surface, which extend sometimes for several These little beings are seen miles. under the microscope as hosts of transparent spherical cells, containing a few red nuclei. On the waters of the Red Sea, another species of alga, Trichodesmium erythræum, belonging to the group

Oscillariae, is found sometimes in prodigious quantities; this is also a microscopic plant, and of such a magnificent blood-colour that there can be little doubt that Herodotus gave the name of "Red Sea" to the Arabian Gulf from this circumstance. After a certain time these algæ completely loose their red colour, and become green, so that the phenome-

non is intermittent.

At the period when carbonate of soda was extracted entirely from the ashes of sea-plants, a very interesting discovery was made, namely, that of iodine. This happened in 1811. It was the custom to send the impure carbonate of soda to refiners, who purified it for the druggists, and converted it into other salts. Now. there lived in Paris a refiner named Courtois, who, after extracting as much . carbonate of soda as he could by crystallizing his solutions, thought that there might still exist in the mother-liquors, from which the crystals were deposited, a certain quantity of carbonate of soda. which might be converted into sulphate of soda by the addition of sulphuric acid. Sulphuric acid was accordingly added to the liquid, and heat applied—the operation taking place in a retort; when Courtois soon perceived a magnificent violet-coloured vapour arise and fill the retort, precipitating itself upon the glass in the form of bright metallic scales of a dark colour. This curious discovery was not made known till two years later, when the chemist Clement brought it before the Academy of Sciences. Sir H. Davy, who was then in Paris, and Gay-Lussac, member of the Academy, investigated the nature of the new substance, and found it to be a simple body or element which they called iodine. And a most useful and interesting substance it has proved, not only in the laboratory, but in medicine and photography.

In a similar way the element bromine was, some years later, discovered in sea-water by M. Balard. This gentleman, thinking, probably, that he would obtain a certain quantity of iodine by passing a current of chlorine gas (which has the property of displacing iodine from its combinations) through seawater, or rather through the mother-liquor from which the sea-salt had been deposited by evaporation, displaced the element bromine at the same time. Bromine, like mercury, is a liquid element at the ordinary temperature of the atmosphere; it is a dark reddish-brown, highly-corrosive, volatile liquid, extremely interesting in a chemical point of view. It is often used by photographers and in medicine.

Another curious chemical substance is connected with the history of the sea. It is mannite. This product, which constitutes the essential part of manna, is a kind of sugar found in the sap of ash-trees, and secreted in hot weather by the tamarix and other shrubs.

Now, mannite has been observed upon certain large sea-weeds (fuci), especially upon Laminaria saccharina, which owes its specific name "saccharina" to the fact that mannite is often observed upon this plant. I believe Dr. Stenhouse was the first to draw attention to this subject. Almost all the larger kinds of sea-weed are capable, in certain circumstances, of producing mannite. It was believed that these marine algae produced this sweet principle in the same manner that the sugar-cane produces sugar, that is, under the influence of the vital functions; but I have shown, a few years ago, that the formation of mannite does not occur during the life of the plant, and that it is only after the plant is dead and exposed to the air that mannite begins to form upon its surface, where it soon shows itself in microscopic crystalline needles, which are soluble in alcohol. It appears to be formed at the expense of the peculiar mucilage which envelops these algæ during life, and protects them from the dissolving influence of the sea.

Various means have been resorted to for protecting ships from the corrosive action of sea-water, and especially from those burrowing worms, *Teredo*, or the destructive mollusc, *Pholas*, &c. In former times minium, or red lead, was

¹ Comptes-rendus de l'Acad. des Sciences. Paris, 1856.

employed as a paint, but was soon proved to be inefficacious; in fact, nothing but metal itself will resist the action of these soft, gelatinous animals. Then came the question-what metal? Iron would not answer, as it oxydates in sea-water with the greatest rapidity, and forms a layer of rust, which cements together plants, stones, shells, &c., causing these substances to adhere to the keel and impede the progress of the ship. Zinc offers the same disadvantages, though to a less extent; a layer of oxide forms upon the metal and protects it completely from any further rusting, which is not the case with iron. Therefore, zinc is sometimes used to sheathe merchant ships, but unfortunately it gives a firm hold to shells and sea-weeds, which cannot be detached without much trouble. Sheet copper is generally employed in the navy, and this metal was found, in spite of its high price, to answer better than either iron or zinc; but of late years a species of brass, containing copper, tin, zinc, lead, and iron, and known as yellow metal, has been almost exclusively employed on merchant ships, and is now beginning to be adopted by the navy in place of pure copper. This yellow metal appears to answer the purpose very well, and is found to be the most economical metal that can be employed. It oxydates much less rapidly than iron or zinc, and does not give hold to shells and seaweeds for any length of time.

It was in analyzing this yellow metal that the presence of silver was discovered in the sea. Sheathing, which, before it was placed upon the ships, showed only the minutest trace of silver, and sometimes none at all, was found, when it had made a three or four years' voyage, to contain a notable amount of that metal. Now, silver exists in nature, here and there, as chloride of silver; and this compound, though insoluble in water, dissolves perfectly in a solution of salt, so that the presence of silver in the water of the ocean is easily accounted for. Delicate analysis shows its presence even in polypes (Pocillopora) and other marine organisms.

In proximity to active volcanoes the

water of the sea is apt to become acid; the acidity being due to considerable quantities of sulphuric and hydrochloric acids dissolved in the water. This is the case, for instance, in the bay of Vulcano, at Santorino. For some time past the waters of this little bay have been spoken of as having the property of cleaning the metallic sheathing of vessels. Ships sheathed with copper or vellow metal will do well to avoid remaining any length of time in such quarters, though the mere passage of the ships through the acid would perhaps be rather beneficial than otherwise. However, since the year 1821, the bay of Vulcano has been almost abandoned by ships. A year or two ago the Solon, a French screw packet-boat stationed in the Levant, had orders to remain some hours in the bay of Vulcano. Its iron keel, coated with many layers of red lead, had collected an endless number of shells, sea-weeds, zoophytes, &c. by which its course had been notably impeded. But after a short delay at Santorino, these appendages were detached with ease by the aid of a brush, and about one knot an hour was immediately gained in speed.

Volumes might be written upon the chemical changes which occur in the formation of new rocks, sedimentary strata, and by the action of sea-water upon the various coasts. Sir Charles Lyell, Beudant, and Bischoff have devoted much time to that subject. It will be easily understood that a liquid like sea-water, carrying in solution so many different ingredients, is capable of developing an endless variety of chemical reactions. Let us turn, for example, to the action of sea-water upon cast iron, which I have been lately investigating, and which is very different from the action of fresh water. Cast iron, as is well known, contains carbon, silicium, and phosphorus. Now, under the influence of sea-water it oxydises or rusts, and at the same time the phosphorus is oxydised to phosphoric acid, which, uniting with the iron, forms the beautiful blue phosphate of iron, known in mineralogy as Vivianite. The silicium

is also oxydised, and forms a green silicate of iron, whilst the carbon is mostly precipitated as graphite or plumbago. A great quantity of rust, or hydrated oxide of iron, is formed, which cements firmly together stones, shells, wood, metals, &c.

By means of the carbonic acid it contains, the water of the ocean possesses the power of corroding chalk-cliffs and dissolving the carbonate of lime which they afterwards deposit in some other quarter as tuffaceous or argillaceous limestone. Such is the rock of modern formation which develops itself upon certain coasts of the new and old continents, and which I have found forming on the coast of Flanders at the expense of the chalk-cliffs of Great Britain and France, and of which I have elsewhere given an analysis.1 I find also that carbonate of lime deposited in this manner from the sea has the property of cementing together a little more than double its own weight of extraneous matter, such as sand and clay, which shows us how argillaceous limestones or calcareous sandstones are formed in nature.

The corals, madrepora, and mollusca withdraw from the sea the carbonate of lime of which their polypidoms and shells are principally formed. My analyses of *Madrepora muricata* of the Indian Ocean, and of the *Cardium edule*, or common cockle of our coasts, show that the polypidom of the former and the shells of the latter contain upwards of 90 per cent. of carbonate of lime. Other chemists have shown that the sea contains less lime where coral-reefs abound.

Thus, the madrepora of the numerous coral-reefs forms excellent lime when burnt, and is employed for that purpose in many tropical islands, where the lime thus produced is used for building.

One of the most curious, and, as it happens, most useful of marine formations, is, probably, the new rock Sombrerite, which I have recently analysed.² This rock, which consists principally of phosphate of lime and phosphate of

² Journal of the Chemical Society. July, 1862.

¹ Comptes-rendus de l'Acad. des Sciences. Paris. 1857 and 1860.

alumina, forms the greater portion of some small islands in the Antilles, especially that of Sombrero, whence I gave it its name. It is very valuable for preparing phosphorus for lucifer-matches, and for agricultural purposes as a source

of phosphate of lime.

Marine algæ, sea-weeds of all sorts, are rich in nitrogen, and have been employed for many years as manure, I believe advantageously; but not only do they evolve a very noxious odour whilst undergoing putrefaction, but it is impossible that they can now compete with the artificial manures produced in such quantities at the present day; and it appears to me that it would be preferable in every respect to burn these fuci, and collect their ashes to procure iodine, as is practised on an extensive scale by the manufacturers of kelp. the hands of Dr. Stenhouse, sea-weeds have given a peculiar product called furfurol, or fucusol, a volatile, oily substance obtained by acting upon the seaweed by sulphuric acid and distilling.1

The sand of the sea-coast is invariably and intimately mixed with the débris of shells and a certain amount of organic matter, besides which it is constantly imbibed with the alkaline salts and other ingredients dissolved in the sea-water, so that it contains all the elements of fertility. The wind raises it into small hillocks called sand-hills, or dunes, which present the same chemical composition

as the sand of the coast.

Two circumstances, however, concur to prevent these sand-hills being as fertile as they may become if we succeed in counteracting the influence of both. The first is the extreme mobility of the sand, which causes the hillocks to be constantly shifting, and to progress every year a certain distance in the direction of the predominant wind. The other circumstance is the rapidity with which the rain-water filters through the sand, leaving the hillocks in a con-

In some regions of the globe we find the ordinary siliceous sand of the coast covered with a layer of bright, black, metallic-looking sand. This is the case on some of the coasts of the Isle Bourbon, Mauritius, Australia, New Zealand, &c. Specimens of this black sand have, within the last few years, been forwarded to me for analysis from the Isle Bourbon, from Mauritius, and from different parts of Western Australia. The essential portion of this sand is the black mineral called iserine, not uncommon in Basaltic districts, which is composed of oxide of titanium and oxide of iron. According to my experiments, the sand is capable of furnishing about 59 per cent. of the most splendid quality

stant state of dessication, at least at the surface. In endeavouring to fertilize the sand-hills, these two influences must be combated. The former is got rid of by planting Elymus arenarius, Arundo arenaria, and other similar grasses, which prosper in the sand, and whose enormous roots (or rhizomes) ramify and penetrate the sand in every direction, holding it firmly together. The shrub Hippophaæ rhamnoïdes is also extremely useful in These plants not only this respect. cement the sand together, as it were, but, by their decay, furnish the hillocks with a certain amount of mould, so that in a few years their fertility is insured. The second influence is combated also, to a certain extent, by the means just alluded to, and more effectually, where it is practicable, by an admixture of clay. The constant humidity and purity of the maritime air, and the warmth of the sun on the slopes protected from the wind, constitute an admirable climate for any kind of vegetation, but more especially The brightness of the for annuals. flowers, and the abundance of essential or fragrant oils remarked in the native plants of these truly favoured districts, indicate clearly that very little trouble is required to render one slope of the dunes eminently fertile. Although the maritime climate is not favourable to trees, the Pinus maritimus flourishes on certain coasts, especially in the Landes of Gascony.

¹ This furfured is easily transformed into another compound, furfurine, which has the properties of quinine; and nitrate of furfurine is actually employed in medicine to combat intermittent fever.

of iron. But innumerable grains of topaz, zircon, ruby, sapphire, and other precious stones, together with magnetic oxide of iron (loadstone), and sometimes, also, grains of oxide of tin and gold, are found mixed with this black sand. Some of the larger specimens of these black districts find their way into the jewellers' hands. In like manner the Baltic Sea throws amber upon the coasts of Prussia, and bitumen is seen floating upon the waters of the inland Asiatic seas.

I have now a few words to say upon the air of the sea. I do not allude to that portion of air which is dissolved by sea-water, and is expelled by boiling the latter, though I should, perhaps, mention that of the two gases, oxygen and nitrogen (or azote), which constitute the atmosphere, oxygen is more than twice as soluble in water as nitrogen, and, therefore, the sea dissolves more of the former than of the latter. So that the air expelled from sea-water, when it is made to boil, contains a mixture of nitrogen and oxygen, which is rather different from that which constitutes atmospheric air. This excess of oxygen in sea-water goes to supply the wants of marine organisms, and contributes its part in the corrosion of the sheathing of ships.

But let us consider for a moment the air that lies on the surface of the sea and coasts, and which enters the lungs of invalids at the sea-side. All the numerous chemical researches of the present day show us that the air of the sea, except it be taken in close proximity to the water, has precisely the same composition as that of the interior of continents. And yet medical men are constantly sending their patients to the sea-side for change of air. Now it is true that, wherever air is analysed, either at the surface of the earth, on the summits of high mountains, at the poles or at the equator, on the coast or in the interior, it constantly contains four volumes (say pints) of nitrogen and one volume of oxygen. Whatever climate we inhabit, such is the composition of atmospheric air. But air invariably contains minute quantities of carbonic acid, generally about two volumes on 10,000 volumes of air; it also contains traces of volatile organic matter, dust, &c., and is more or less damp according to the locality; and, though the fundamental proportions of oxygen and nitrogen remain the same everywhere, these other elements which enter into its composition as mere traces vary in proportion, and exercise such a marked influence upon our organism, in spite of their extremely small proportion, in a given volume of air, that we can only explain it by reflecting that their action is constant in a given locality, and consequently that their deleterious effects increase with the time we remain in that locality. It has been proved by Dr. Verhaeghe, of Ostend, that the carbonic acid and organic matter are less abundant in the air of the sea than in that of the interior, and. therefore, that the air of the sea is the purer of the two. But that is not all; there is another and very important consideration. The air on the mountains is, in some instances, even purer than that of the sea; but it does not produce that exhilarating sensation which a person who has once breathed the air of the coast rarely or ever forgets. The reason of this lies in the density of the air at the level of the sea, in comparison with its density on the mountain heights. Everyone knows that, cæteris paribus, the barometer stands higher at the level of the sea than in any other locality; consequently, that a pint of air weighs a little more at the sea-side than a pint of air at the mountain-top. But, as our lungs have the same capacity wherever we happen to be, it is evident that at the sea-side we breathe, in a given time, a greater weight of oxygen gas than anywhere else; and it is to this greater weight of oxygen introduced into the lungs at each inspiration, that we owe the exhibarating or stimulating action by which the air of the sea is preeminently characterised. Instead of carrying dust, the sea-breeze wafts saline particles through the air, which adhere to the plants, animals, and rocks of the coast. This accounts for the salt taste experienced by those who walk with their face towards the wind.

Verhaeghe found that, when 445 gallons of sea-air were passed through a solution of nitrate of silver, a precipitate of chloride of silver, weighing six grains, was produced; this corresponds to 2.4 grains of common salt wafted about by

every 445 gallons of air.

It is to these saline particles, consisting of all the various mineral ingredients dissolved in the sea, and to minute quantities of hydrochloric acid, iodine, and organic matters, separated from the water by the mechanical action of the winds, by the vital functions of sea-weeds, mollusca, &c., and evolved by decaying fuci, that the air of the sea derives its peculiar odour. Some have attributed to this odour in the air the rareness of consumption on the sea-coast; and the eminent surgeon Laënnec had so much confidence in the effects of these saline particles on the constitution, that, when he could not send his patients to the sea-side, he procured for them, at considerable expense, masses of sea-weed, which he placed in their bedrooms, in order to form artificially, as he thought, a marine atmosphere.

The peculiar and characteristic odour of the sea to which I allude here attracted the attention of the ancients. Quintus Curtius Rufus, in his history of the reign of Alexander the Great, says that the pilots of Alexander, when on land, recognised the sea by its odour -"agnoscere se auram maris"-that is to say, that they were made aware that they were approaching the ocean by the peculiar smell wafted through the atmosphere. Whilst exploring the tertiary formations of Bruxelles, I discovered that the antediluvian seas possessed the same characteristic odour as the sea of the present day. I found that the fossil teredos freshly taken from the sandy strata, and scratched with a knife or broken with a hammer, emit this same odour of the sea. But the strata in which these fossils lie is known to geologists as the Middle Eccene; they have therefore retained their odour for thousands of centuries!

Of the phosphorescence, or emission of light by the sea, I have treated at length elsewhere; 1 and will only state here that this beautiful phenomenon is owed to myriads of minute beings, which emit light like the common glow-worm. The animalcule which illuminates the waves of the North Sea is Noctiluca miliaris, a minute rhizopod, about the size of a pin's point. The curious mer-de-lait -luminous patches extending for many miles in the warmer seas-is caused by Pyrosoma atlantica, and various species of Salpa, which swim adhering together by thousands. In the Baltic, the Adriatic, and even our own seas, numerous light-emitting Infusoria, Nereids, Medusæ, &c. have been found and described.

The abundance of marine animalcules, and the animal matter yielded by their rapid decomposition, and by that of seaweeds, which vary in size from the microscopic Fucus ferruginea to the gigantic Macrocystis of many hundred feet, make sea-water a nutritive fluid for many larger animals; and it doubtless contains several well-defined organic substances, similar to those we find in springs, though no one has yet endea-

voured to extract them.

It is a curious fact, discovered by Benjamin Franklin, and which attracted the attention of Sir H. Davy, that in the neighbourhood of sand-banks and shoals, where the water is shallow, the temperature of the sea is much cooler than in the adjacent deep water. This circumstance often causes mists to lie over the shoals, and defines sharply their extent. According to Davy, this cooling of the water near the sand-banks occurs thus: the heat lost by nocturnal radiation causes the colder (and consequently heavier) water to descend in the daytime, but where sand-banks exist this descent of the cooled water is impeded, and the cold water remains near the surface. By means of this knowledge Franklin may be said to have converted the thermometer into a sounding line.

I have now terminated this very incomplete sketch of what has been done concerning the chemistry of the sea.

¹ Phosphorescence; or, the Emission of Light by Minerals, Plants, and Animals. In 8vo. London. 1862.

Much remains vet to be done; and we have before us an admirable example, in the researches undertaken with so much perseverance for the last twenty years, to bring the phenomena of the sea within the domain of physical laws. The perusal of Lieutenant Maury's interesting volume on the physical geography of the sea, and Sir William Snow Harris's admirable treatise on magnetism, together with General Sabine's indefatigable labours on the same subject, proves to us that, whilst studying the various currents, winds, temperatures, and depths of the different seas, we cannot bestow too much attention on the magnetic needle, if we wish for equally important and practical results.

In conclusion, I wish to allude to a beautiful rotation we observe in connexion with the water of the sea. Tons of water are evaporated daily from the surface of the ocean. The water that rises in this way is pure; it constitutes clouds; the clouds give birth to rain, which, filtering through the earth, forms sources, streams, and rivers. These rivers on their passage to the sea dissolve every soluble ingredient they meet with, and carry it to the ocean; moreover, the sea itself corrodes the various coasts and dissolves saline matter daily. ocean is, in the case of those inland seas alluded to before, as receiving salts by rivers which flow into them, and have no outlet. But we have seen that such lakes finish by becoming so salt that no plants or animals can exist in them; whereas the sea shows the same 31 per cent. of

salts ever since it first began to be analysed. In the present paper I have partly hinted at the cause of this, and I will now complete the idea. The saline matter of the ocean is required by the plants and animals that inhabit it. We have seen that, in the neighbourhood of Madrepora reefs, the sea contains less lime, because these animals constantly subtract lime from the water. So other animals and plants subtract silica, potash, soda, sulphuric acid, &c. In the ashes of Luminaria saccharina, of which I have already spoken, the carbonates predominate; in those of Fucus vesiculosus, and F. serratus, the sulphates are in excess. It is curious to note also that the salts of potash exist in small proportion in sea-water, whilst soda-salts are abundant, and, nevertheless, that in certain fuci which live in the sea we find sometimes more potash than soda. This is the case, for instance, with Laminaria saccharina. In other sea-weeds and plants which grow on the shore, the quantity of soda predominates, and upon this fact was based the old method of obtaining carbonate of soda. But in many sea-weeds when they grow near the shore, we find from 5 to 8 per cent. of potash. Besides salt that is daily extracted from the sea by these plants and animals, the sea receives every year an enormous amount of pure distilled water in the shape of rain; and these two causes united explain why the total amount of saline matter of the ocean remains constantly the same.

THE BOURNE.

Underneath the growing grass,
Underneath the living flowers,
Deeper than the sound of showers:
There we shall not count the hours
By the shadows as they pass.
Youth and health will be but vain,
Courage reckoned of no worth:
There a very little girth
Can hold round what once the earth
Seemed too parrow to contain.

CHRISTINA G. ROSSETTI.

THE WATER-BABIES:

A FAIRY TALE FOR A LAND-BABY.

BY THE REV. PROFESSOR KINGSLEY, F.L.S. ETC.

CHAPTER VIII. AND LAST.

Here begins the never-to-be-too-muchstudied account of the one nine-hundredand-ninety-ninth part of the wonderful things which Tom saw, on his journey to the Other End Of Nowhere; which all good little children are requested to read, that, if ever they get to the Other End Of Nowhere, as they may very probably do, they may not burst out laughing, or try to run away, or do any other silly vulgar thing which may offend Mrs. Bedonebyasyoudid.

Now, as soon as Tom had left Peacepool, he came to the white lap of the great sea-mother, ten thousand fathoms deep; where she makes world-pap all day long, for the steam-giants to knead, and the fire-giants to bake, till it has risen and hardened into mountain-loaves and

island-cakes.

And there Tom was very near being kneaded up in the world-pap, and turned into a fossil water-baby; which would have astonished the Geological Society of New Zealand some hundreds of

thousands of years hence.

For, as he walked along in the silence of the sea-twilight, on the soft white ocean floor, he was aware of a hissing, and a roaring, and a thumping, and a pumping, as of all the steam-engines in the world at once. And, when he came near, the water grew boiling hot; not that that hurt him in the least: but it also grew as foul as gruel; and every moment he stumbled over dead shells, and fish, and sharks, and seals, and whales, which had been killed by the hot water.

And at last he came to the great seaserpent himself, lying dead at the bottom; and, as he was too thick to scramble

over, Tom had to walk round him threequarters of a mile and more, which put him out of his path sadly; and, when he had got round, he came to the place called Stop. And there he stopped, and just in time.

For he was on the edge of a vast hole in the bottom of the sea, up which was rushing and roaring clear steam enough to work all the engines in the world at once; so clear, indeed, that it was quite light at moments; and Tom could see almost up to the top of the water above, and down below into the

pit for nobody knows how far.

But, as soon as he bent his head over the edge, he got such a rap on the nose from pebbles, that he jumped back again; for the steam, as it rushed up, rasped away the sides of the hole, and hurled it up into the sea in a shower of mud, and gravel, and ashes; and then it spread all around, and sank again, and covered in the dead fish so fast, that, before Tom had stood there five minutes, he was buried in silt up to his ancles, and began to be afraid that he should have been buried alive.

And perhaps he would have been, but that, while he was thinking, the whole piece of ground on which he stood was torn off, and blown upwards, and away flew Tom, a mile up through the sea, wondering what was coming next.

At last he stopped—bump! and found himself tight in the legs of the most wonderful bogy which he had ever

seen.

It had I don't know how many wings, as big as the sails of a windmill, and spread out in a ring like them; and with them it hovered over the steam which rushed up, as a ball hovers over the top of a fountain. And for every wing above it had a leg below, with a claw like a comb at the tip, and a nostril at the root; and in the middle it had no stomach and one eye; and as for its mouth, that was all on one side, as the madreporiform tubercle in a sea-egg is. Well, it was a very strange beast; but no stranger than some dozens which you may see.

"What do you want here," it cried quite peevishly, "getting in my way?" and it tried to drop Tom; but he held on tight to its claws, thinking himself

safer where he was.

So Tom told him who he was, and what his errand was. And the thing winked its one eye, and sneered:

"I am too old to be taken in in that way. You are come after gold—I know

you are."

"Gold! What is gold?" And really Tom did not know; but the suspicious old bogy would not believe him.

But after a while Tom began to understand a little. For, as the vapours came up out of the hole, the bogy smelt them with his nostrils, and combed them and sorted them with his combs; and then, when they steamed up through them against his wings, they were changed into showers and streams of metal. From one wing fell gold-dust, and from another silver, and from another copper, and from another tin, and from another lead, and so on, and sank into the soft mud, into veins and cracks, and hardened there. Whereby it comes to pass that the rocks are full of metal.

But, all of a sudden, somebody shut off the steam below, and the hole was left empty in an instant: and then down rushed the water into the hole, in such a whirlpool that the bogy spun round and round as fast as a tee-totum. But that was all in his day's work, like a fair fall with the hounds; so all he did was to say to Tom—

"Now is your time, youngster, to get down, if you are in earnest, which I

don't believe."

"You'll soon see," said Tom; and away he went, as bold as Baron Munchausen, and shot down the rushing cataract like a salmon at Ballisodare. And, when he got to the bottom, he swam till he was washed on shore safe upon the Other End of Nowhere; and he found it, to his surprise (as most folks do), much more like this End of Somewhere than he had been in the habit of expecting.

And first he went through Wastepaper-land, where all the stupid books lie in heaps, up hill and down dale, like leaves in a winter wood; and there he saw people digging and grubbing among them, to make worse books out of bad ones, and thrashing chaff to save the dust of it; and a very good trade they drove thereby, especially among children.

Then he went by the sea of slops, to the mountain of messes, and the territory of tuck; where the ground was very sticky, and full of deep cracks and holes, choked with wind-fallen fruit, and green gooseberries, and sloes, and crabs, and whimberries, and hips and haws, and all the nasty things which little children will eat if they can get them. But the fairies hide them out of the way in that country as fast as they can, and very hard work they have, and of very little use it is. For, as fast as they hide away the old trash, foolish and wicked people make fresh trash, full of lime, and poisonous paints, and actually go and steal receipts out of old Madame Science's big book to invent poisons for little children, and sell them at wakes and fairs, and tuck-shops. Very well. Let them go Dr. Letheby and Dr. Hassall cannot catch them, though they are setting traps for them all day long. But the Fairy with the birch-rod will catch them all in time, and make them begin at one corner of their shops, and eat their way out at the other: by which time they will have got such stomach-aches as will cure them of poisoning little children.

Next he saw all the little people in the world, writing all the little books in the world, about all the other little people in the world; probably because they had no great people to write about: and the names of the books were "Squeeky," and the "Pumplighter," and the "Narrow Narrow World," and the "Hills of the Chattermuch," and the "Children's Twaddeday." And all the rest of the little people in the world read the books, and thought themselves each as good as the President; and perhaps they were right, for every one knows his own business best. But Tom thought he would sooner have a jolly good fairy tale, about Jack the Giant-killer or Beauty and the Beast, which taught him something that he didn't know already.

And next he came to the centre of Creation (the hub, they call it there), which lies in latitude 42.21 south, and

longitude 108.56 east.

And there he found all the wise people instructing mankind in the science of spirit-rapping, while their house was burning over their heads: and, when Tom told them of the fire, they held an indignation meeting forthwith, and unanimously determined to hang Tom's dog for coming into their country with gunpowder in his mouth. Tom couldn't help saying that, though they did fancy that they had carried all the wit away with them out of Lincolnshire two hundred years ago, yet if they had had one such Lincolnshire nobleman among them as good old Lord Yarborough, he would have called for the fire-engines before he hanged other people's dogs. But it was of no use, and the dog was hanged : and Tom couldn't even have his carcase; for they had abolished the have-his-carcase act in that country, for fear lest, when rogues fell out, honest men should come by their own. And so they would have succeeded perfectly, as they always do, only that (as they also always do) they failed in one little particular, viz. that the dog would not die, being a water-dog, but bit their fingers so abominably that they were forced to let him go, and Tom likewise, as British subjects. Whereon they recommenced rapping for the spirits of their fathers; and very much astonished the poor old spirits were when they came, and saw how, according to the laws of Mrs. Bedonebyasyoudid, their descendents had weakened their constitution by hard living.

And next he came to the island of the Golden Asses, where nothing but No. 41.—vol. vii. thistles grow. There the people live who have turned themselves into mokes, by meddling with matters which they do not understand, as Lucius did in the story. And, like him, mokes they must remain, till, by the laws of development, the thistles develope into roses. Till then, they must comfort themselves with the thought, that the longer their ears are the thicker their hides; and so a good beating don't hurt them.

And then he came to Gotham, where the wise men live; the same who dragged the pond because the moon had fallen into it, and planted a hedge round the cuckoo, to keep spring all the year. And he found them bricking up the town gate, because it was so wide that little folks could not get through. And, when he asked why, they told him they were expanding their liturgy. So he went on; for it was no business of his: only he could not help saying that in his country, if the kitten could not get in at the same hole as the cat, she might stay outside and mew.

And next he came to Oldwivesfabledom, where the folks were all heathens, and worshipped a howling ape.

And there he found a little boy sitting in the middle of the road, and crying bitterly.

"What are you crying for?" said Tom.
"Because I am not as frightened as I

could wish to be?"
"Not frightened? You are a queer little chap: but, if you want to be frightened, here goes—Boo!"

"Ah," said the little boy, "that is very kind of you; but I don't feel that

it has made any impression."

Tom offered to upset him, punch him, stamp on him, fettle him over the head with a brick, or anything else whatsoever which would give him the slightest comfort.

But he only thanked Tom very civilly, in fine long words which he had heard other folk use, and which, therefore, he thought were fit and proper to use himself; and cried on till his papa and mamma came, and sent off for the Powwow man immediately. And a very good-natured gentleman and lady they were, though they were heathens; and talked quite pleasantly to Tom about his travels, till the Powwow man arrived, with his thunder-

box under his arm.

And a well-fed, ill-favoured gentleman he was, as ever served her Majesty at Portland. Tom was a little frightened at first; for he thought it was Grimes. But he soon saw his mistake: for Grimes always looked a man in the face; and this fellow never did. And when he spoke, it was fire and smoke; and when he sneezed, it was squibs and crackers; and when he cried (which he did whenever it paid him), it was boiling pitch; and some of it was sure to stick.

"Here we are again!" cried he, like the clown in a pantomime. "So you can't feel frightened, my little dear th? I'll do that for you. I'll make an impression on you! Yah! Boo!

Whirroo! Hullabaloo!"

And he rattled, thumped, brandished his thunderbox, yelled, shouted, raved, roared, stamped, and danced corrobory like any black fellow; and then he touched a spring in the thunderbox, and out popped turnip-ghosts, and magic-lanthorns, and pasteboard bogies, and spring-heeled Jacks, and sallabalas, with such a horrid din, clatter, clank, roll, rattle, and roar, that the little boy turned up the whites of his eyes, and fainted

right away.

And at that his poor heathen papa and mamma were as much delighted as if they had found a gold mine; and fell down upon their knees before the Powwow man, and gave him a palanquin with a pole of solid silver and curtains of cloth of gold; and carried him about in it on their own backs, for the rest of their lives: which was a pitiable sight to see; for the father was a very brave officer, and wore two swords and a blue button; and the mother was as pretty a lady as ever you saw in your life.

Ah! don't you wish that some one would go and convert those poor heathens, and teach them not to frighten their little children into fits? "Now, then," said the Powwow man to Tom, "wouldn't you like to be frightened, my little dear? For I can see plainly that you are a very wicked, naughty, graceless, reprobate boy."

"You're another," quoth Tom, very sturdily. And when the man ran at him, and cried "Boo!" Tom ran at him in return, and cried "Boo!" likewise, right in his face, and set the little dog upon him; and at his legs the dog

went.

At which, if you will believe it, the fellow turned tail, thunderbox and all, with a "Woof!" like an old sow on the common; and ran for his life, screaming, "Help! thieves! murder! fire! He is going to kill me! I am a ruined man! He will murder me, and break, burn, and destroy my precious and invaluable thunderbox; and then you will have no more thunder in the

land. Help! help! help!"

At which the papa and mamma, and all the people of Oldwivesfabledom, flew at Tom, shouting, "Oh, the wicked, impudent, hard-hearted, graceless boy! Beat him, kick him, shoot him, drown him, hang him, burn him!" and so forth: but luckily they had nothing to shoot, hang, and burn, him with, for the fairies had hid all the killing-tackle out of the way a little while before; so they could only pelt him with stones; and some of the stones went clean through him, and came out the other But he did not mind that a bit; for the holes closed up again as fast as they were made, because he was a waterbaby. However, he was very glad when he was safe out of the country, for the noise there made him all but deaf.

And then he came to a very quiet place, called Leaveheavenalone. And there the sun was drawing water out of the sea to make steam-threads, and the wind was twisting them up to make cloud-patterns, till they had worked between them the loveliest wedding veil of Chantilly lace, and hung it up in their own Crystal Palace, for any one to buy who could afford it. And the good old sea never grudged; for she knew they would pay her back honestly. So the

sun span, and the wind wove, and all went well with the great steam-loom, as is likely, considering—and considering

-and considering-

And at last, after innumerable adventures, each more wonderful than the last, he saw before him a huge building, much bigger, and-what is most surprising-a little uglier than a certain new lunatic asylum, but not built quite of the same materials. None of it, at least-or, indeed, for aught that I ever saw, any part of any other building whatsoever-is cased with nine-inch brick inside and out, and filled up with rubble between the walls, in order that any gentleman who has been confined during her Majesty's pleasure may be unconfined during his own pleasure, and take a walk in the neighbouring park to improve his spirits, after an hour's light and wholesome labour with his dinnerfork, or one of the legs of his iron bedstead. No. The walls of this building were built on an entirely different principle, which need not be described, as it has not yet been discovered.

Tom walked towards this great building, wondering what it was, and having a strange fancy that he might find Mr. Grimes inside it, till he saw running toward him, and shouting "Stop!" three or four people, who, when they came nearer, were nothing else than policemen's truncheons, running along

without legs or arms.

Tom was not astonished. He was long past that, Besides, he had seen the naviculæ in the water move nobody knows how, a hundred times, without arms, or legs, or anything to stand in their stead. Neither was he frightened; for he had been doing no harm.

So he stopped; and, when the foremost truncheon came up and asked his business, he showed Mother Carey's pass, and the truncheon looked at it in the oddest fashion; for he had one eye in the middle of his upper end, so that when he looked at anything, being quite stiff, he had to slope himself, and poke himself, till it was a wonder why he did not tumble over; but, being quite full of the spirit of justice (as all policemen,

and their truncheons, ought to be), he was always in a position of stable equilibrium, whichever way he put himself.

"All right—pass on," said he at last. And then he added: "I had better go with you, young man." And Tom had no objection, for such company was both respectable and safe; so the truncheon coiled its thong neatly round its handle, to prevent tripping itself up—for the thong had got loose in running—and marched on by Tom's side.

"Why have you no policeman to carry you?" asked Tom, after a while.

"Because we are not like those clumsy-made truncheons in the land-world, which cannot go without having a whole man to carry them about. We do our own work for ourselves; and do it very well, though I say it who should not."

"Then, why have you a thong to your handle?" asked Tom.

"To hang ourselves up by, of course, when we are off duty."

Tom had got his answer, and had no more to say, till they came up to the great iron door of the prison. And there the truncheon knocked twice, with its own head.

A wicket in the door opened, and out looked a tremendous old brass blunderbuss, charged up to the muzzle with slugs, who was the porter, and Tom started back a little at the sight of him.

"What case is this?" he asked in a deep voice, out of his broad bell-mouth.

"If you please, sir, it is no case; only a young gentleman from her ladyship, who wants to see Grimes the master-sweep."

"Grimes?" said the blunderbuss. And he pulled in his muzzle, perhaps

to look over his prison-lists.

"Grimes is up chimney No. 345," he said from inside. "So the young gentleman had better go on to the roof."

Tom looked up at the enormous wall, which seemed at least ninety miles high, and wondered how he should ever get up: but, when he hinted that to the truncheon, it settled the matter

in a moment. For it whisked round, and gave him such a shove behind, as sent him up to the roof in no time, with his little dog under his arm.

And there he walked along the leads, till he met another truncheon, and told

him his errand.

"Very good," it said. "Come along: but it will be of no use. He is the most unremorseful, hard-hearted, found thinks about nothing but beer and pipes, which are not allowed here, of course."

So they walked along over the leads, and very sooty they were, and Tom thought the chimneys must want sweeping very much. But he was surprised to see that the soot did not stick to his feet, or dirty them in the least. Neither did the live coals, which were lying about in plenty, burn him; for, being a water-baby, his radical humours were of a moist and cold nature, as you may read at large in Lemnius, Cardan, Van Helmont, and other gentlemen, who knew as much as they could, and no man can know more.

And at last they came to chimney No. 345. Out of the top of it, his head and shoulders just showing, stuck poor Mr. Grimes; so sooty, and bleared, and ugly, that Tom could hardly bear to look at him. And in his mouth was a pipe—but it was not a-light; though he was pulling at it with all his might.

"Attention, Mr. Grimes," said the truncheon; "here is a gentleman come

to see you."

But Mr. Grimes only said bad words; and kept grumbling, "My pipe won't

draw! My pipe won't draw!"

"Keep a civil tongue, and attend!" said the truncheon; and popped up just like Punch, hitting Grimes such a crack over the head with itself, that his brains rattled inside like a dried walnut in its shell. He tried to get his hands out, and rub the place: but he could not, for they were stuck fast in the chimney.

Now he was forced to attend.

"Hey!" he said, "why, it's Tom! I suppose you have come here to laugh at me, you spiteful little atomy?"

Tom assured him he had not, but only wanted to help him.

"I don't want anything, except beer, and that I can't get; and a light to this bothering pipe, and that I can't get

either."

"I'll get you one," said Tom; "and he took up a live coal (there were plenty lying about) and put it to Grimes's pipe, but it went out instantly.

"It's no use," said the truncheon, leaning itself up against the chimney,

and looking on.

"I tell you, it is no use. His heart is so cold that it freezes everything that comes near him. You will see that

presently, plain enough."

"Oh, of course, it's my fault. Everything's always my fault," said Grimes.
"Now don't go to hit me again (for the truncheon started upright, and looked very wicked); you know, if my armswere only free, you daren't hit me then."

The truncheon leant back against the chimney, and took no notice of the personal insult, like a well-trained policeman as it was, though he was ready enough to avenge any transgression against morality or order.

"But can't I help you in any other way? Can't I help you to get out of

this chimney ?" said Tom.

"No," interposed the truncheon; "he has come to the place where everybody must help themselves; and he will find it out, I hope, before he is done with me."

"Oh, yes," said Grimes, "of course it's me. Did I ask to be brought here into the prison? Did I ask to be set to sweep your foul chimneys? Did I ask to have lighted straw put under me to make me go up? Did I ask to stick fast in the very first chimney of all, because it was so shamefully clogged up with soot? Did I ask to stay here—I do know how long—a hundred years, I do believe, and never get my pipe, nor my beer, nor nothing fit for a beast, let alone a man."

"No," answered a solemn voice behind. "No more did Tom, when you behaved to him in the very same way."

It was Mrs. Bedonebyasyoudid. And, when the truncheon saw her, it started bolt upright—Attention!—and made such a low bow, that, if it had not been full of the spirit of justice, it must have tumbled on its end, and probably hurt its one eye. And Tom made his bow too.

"Oh, ma'am," he said, "don't think about me; that's all past and gone, and good times and bad times and all times pass over. But may not I help poor Mr. Grimes? Mayn't I try and get some of these bricks away, that he may move his arms?"

"You may try, of course," she said. So Tom pulled and tugged at the

bricks: but he could not move one.

And then he tried to wipe Mr. Grimes's
face: but the soot would not come off.

"Oh, dear!" he said, "I have come all this way, through all these terrible places, to help you, and now I am of no use after all."

"You had best leave me alone," said Grimes; "you are a good-natured forgiving little chap, and that's truth; but you'd best be off. The hail's coming on soon, and it will beat the eyes out of your little head."

"What hail ?"

"Why hail that falls every evening here; and, till it comes close to me, it's like so much warm rain: but then it turns to hail over my head, and knocks me about like small shot."

"That hail will never come any more," said the strange lady. "I have told you before what it was. It was your mother's tears; those which she shed when she prayed for you by her bedside; but your cold heart froze it into hail. But she is gone to heaven now, and will weep no more for her graceless son."

Then Grimes was silent a while; and

then he looked very sad.

"So my old mother's gone, and I never there to speak to her! Ah! a good woman she was, and might have been a happy one, in her little school there in Vendale, if it hadn't been for me and my bad ways."

"Did she keep the school in Vendale?" asked Tom. And then he told Grimes all the story of his going to her house, and how she could not abide the sight of a chimney-sweep, and then how kind she was, and how he turned into a water-baby.

"Ah!" said Grimes, "good reason she had to hate the sight of a chimney-sweep. I ran away from her and took up with the sweeps, and never let her know where I was, nor sent her a penny to help her, and now it's too late—too late!" said Mr. Grimes.

And he began crying and blubbering like a great baby, till his pipe dropped out of his mouth, and broke all to bits.

"Oh dear! if I was but a little chap in Vendale again, to see the clear beck, and the apple orchard, and the yew hedge, how different I would go on! But it's too late now. So you go along, you kind little chap, and don't stand to look at a man crying, that's old enough to be your father, and never feared the face of man, or horse neither. But I'm beat now, and beat I must be. I've made my bed, and I must lie on it. It's all my own fault; but it's too late." And he cried so bitterly that Tom began crying too.

"Never too late," said the fairy, in such a strange soft new voice that Tom looked up at her; and she was so beautiful for the moment, that Tom half

fancied she was her sister.

And no more it was too late. For, as poor Grimes cried and blubbered on, his own tears did what his mother's could not do, and Tom's could not do, and nobody's on earth could do for him; for they washed the soot off his face and off his clothes; and then they washed the mortar away from between the bricks, and the chimney crumbled down, and Grimes began to get out of it.

Up jumped the truncheon, and was going to hit him on the crown a tremendous thump, and drive him down again like a cork into a bottle. But the

strange lady put it aside.

"Will you obey me if I give you a

chance ? "

"As you please, ma'am. You're stronger than me, that I know too well, and wiser than me, I know too well

also. And, as for being my own master, I've fared ill enough with that as yet. So whatever your ladyship pleased to order me, for I'm beat, and that's the truth."

"Be it so then—you may come out. But remember, disobey me again, and into a worse place still you go."

"I beg pardon, ma'am, but I never disobeyed you that I know of. I never had the honour of setting eyes upon you till I came to these ugly quarters."

"Every bad word that you said every cruel and mean thing that you did—every time that you got tipsy every day that you went dirty—you were disobeying me, whether you knew it or not."

"If I'd only known, ma'am-"

"You knew well enough that you were disobeying something, though you did not know it was me. But come out and take your chance. Perhaps it may be your last."

So Grimes stept out of the chimney, and, really, if it had not been for the scars on his face, he looked as clean and respectable as a master-sweep need look.

"Take him away," said she to the truncheon, "and give him his ticket-ofleave."

"And what is he to do, ma'am ?"

"Get him to sweep out the crater of Etna; he will find some very steady men working out their time there, who will teach him his business: but mind, if that crater gets choked again, and there is an earthquake in consequence, bring them all to me, and I shall investigate the case very severely."

So the truncheon marched off Mr. Grimes, looking as meek as a drowned

WOWN

And for aught I know, or do not know, he is sweeping the crater of Etna to this very day.

"And now," said the fairy to Tom, "your work here is done. You may as

well go back again."

"I should be glad enough to go," said Tom, "but how am I to get up that great hole again, now the steam has stopped blowing?"

"I will take you up the backstairs:

but I must bandage your eyes first; for I never allow anybody to see those backstairs of mine."

"I am sure I shall not tell anybody about them, ma'am, if you bid me not."

"Aha! So you think, my little man. But you would soon forget your promise if you got back into the land-world. For, if people only once found out that you had been up my backstairs, you would have all the fine ladies kneeling to you, and the rich men emptying their purses before you, and statesmen offering you place and power; and young and old, rich and poor, crying to you, 'Only tell us the great backstairs secret, and we will be your slaves; we will make you lord, king, emperor, bishop, archbishop, pope, if you like—only tell us the secret of the backstairs. For thousands of years we have been paying, and petting, and obeying, and worshipping quacks who told us they had the key of the backstairs, and could smuggle us up them; and in spite of all our disappointments, we will honour, and glorify, and adore, and beatify, and translate, and apotheotize you likewise, on the chance of your knowing something about the backstairs, that we may all go on pilgrimage to it, and, even if we cannot get up it, lie at the foot of it, and cry-

'Oh backstairs, precious backstairs, invaluable b. requisite b. necessary b. good-natured b. cosmopolitan b. comprehensive b. accommodating b. well-bred b. comfortable b. humane b. reasonable b. long-sought b. coveted b.

aristocratic b.
respectable b.
gentlemanlike b.
ladylike b.
commercial b.
economical b.
practical b.
logical b.
deductive b.
orthodox b.
probable b.
credible b.
demonstrable b.
irrefragable b.

potent b. all-but-omnipotent b. &c.

Save us from the consequences of our own actions, and the cruel fairy, Mrs. Bedonebyasyoudid!' Do not you think that you would be a little tempted then to tell what you know, laddie?"

Tom thought so certainly. 'But why do they want so to know about the backstairs?" asked he, being a little frightened at the long words, and not understanding them the least; as, indeed, he was not meant to do, or you

"That I shall not tell you. I never put things into little folks' heads which are but too likely to come there of themselves. So come—now I must bandage your eyes." So she tied the bandage on his eyes with one hand, and with the

other she took it off.

"Now," she said, "you are safe up the stairs." Tom opened his eyes very wide, and his mouth too; for he had not, as he thought, moved a single step. But, when he looked round him, there could be no doubt that he was safe up the backstairs, whatsoever they may be, which no man is going to tell you, for the plain reason that no man knows.

The first thing which Tom saw was the black cedars, high and sharp against the rosy dawn; and St. Brandan's Isle reflected double in the still, broad, silver sea. The wind sang softly in the cedars, and the water sang among the caves; the sea-birds sang as they streamed out into the ocean, and the land-birds as they built among the boughs; and the air was so full of song that it stirred St. Brandan and his hermits, as they slumbered in the shade; and they moved their good old lips, and sang their morning hymn amid their dreams. But among all the songs one came across the water more sweet and clear than all; for it was the song of a young girl's voice.

And, as Tom neared the island, there sat upon a rock the most graceful creature that ever was seen, looking down, with her chin upon her hand, and paddling with her feet in the water. And when they came to her she looked up, and

behold it was Ellie.

"Oh, Miss Ellie," said he, "how you are grown !"

"Oh, Tom," said she, "how you are grown, too!"

And no wonder; they were both

quite grown up-he into a tall man, and she into a beautiful woman.

"Perhaps I may be grown," she said. "I have had time enough; for I have been sitting here waiting for you many a hundred years, till I thought you were

never coming."

"Many a hundred years!" thought Tom; but he had seen so much in his travels that he had quite given up being astonished; and, indeed, he could think of nothing but Ellie. So he stood and looked at Ellie, and Ellie looked at him; and they liked the employment so much that they stood and looked for seven years more, and neither spoke or stirred.

At last they heard the fairy say : "Attention, children! Are you never

going to look at me again ?"

"We have been looking at you all this while," they said. And so they thought they had been.

"Then look at me once more," said she. They looked—and both of them cried out at once, "Oh, who are you, after all ?"

"You are our dear Mrs. Doasyonwouldbedoneby."

"No, you are good Mrs. Bedonebyasyoudid; but you are grown quite beautiful now!"

"To you," said the fairy. "But look

again."

"You are Mother Carey," said Tom, in a very low, solemn voice; for he had found out something which made him very happy, and yet frightened him more than all that he had ever seen.

"But you are grown quite young

again."

"To you," said the fairy. "Look again."

And when they looked she was neither of them, and yet all of them at once.

"My name is written in my eyes, if you have eyes to see it there."

And they looked into her great, deep, soft eyes, and they changed again and again into every hue, as the light changes in a diamond.

"Now read my name," said she, at

And her eyes flashed, for one moment, clear, white, blazing light.; but the children could not read her name; for they were dazzled, and hid their faces in their hands.

"Not yet, young things, not yet," said she, smiling; and then she turned

to Ellie.

"You may take him home with you now on Sundays, Ellie; he has won his spurs in the great battle, and become fit to go with you, and be a man; because he has done the thing he did not like."

So Tom went home with Ellie on Sundays, and sometimes on week-days, too; and he is now a great man of science, and can plan railroads, and steam-engines, and electric telegraphs, and rifled guns, and so forth; and knows everything about everything, except why a hen's egg don't turn into a crocodile, and two or three other little things which no one will know till the coming of the Cocqeigrues. And all this from what he learnt when he was a water-baby, underneath the sea.

"And of course Tom married Ellie?"
My dear child, what a silly notion!
Don't you know that no one ever marries
in a fairy tale under the rank of a prince

or a princess?

"And Tom's dog ?"

Oh, you may see him any clear night in July; for the old dog-star was so worn out by the last three hot summers that there have been no dog-days since; so that they had to take him down and put Tom's dog up in his place. Therefore, as new brooms sweep clean, we may hope for some decently warm weather this year. And that is the end of my story.

MORAL

And now, my dear little man, what should we learn from this parable?

We should learn thirty-seven or thirtynine things, I am not exactly sure which: but one thing, at least, we may learn, and that is this—when we see efts in the ponds, never to throw stones at them, or catch them with crooked pins, or put them into vivariums with sticklebacks, that the sticklebacks may prick them in their poor little stomachs, and make them jump out of the glass into somebody's workbox, and so come to a bad end. For these efts are nothing else but the water-babies who are stupid and dirty, and will not learn their lessons and keep themselves clean; and, therefore (as comparative anatomists will tell you fifty years hence, though they are not learned enough to tell you now), their skulls grow flat, and their jaws grow out, and their brains grow small, and their tails grow long, and they lose all their ribs (which I am sure you would not like to do), and their skins grow dirty and spotted, and they never get into the clear rivers, much less into the great wide sea, but hang about in dirty ponds, and live in the mud, and eat worms, as they deserve to do.

But that is no reason why you should ill-use them: but only why you should pity them, and be kind to them, and hope that some day they will wake up, and be ashamed of their nasty, dirty, lazy, stupid life, and repent, and try to amend, and become something better once more. For, perhaps, if they do so, then after 379,423 years, nine months, thirteen days, two hours, and twentyone minutes, as far as I can calculate, if they work very hard, and wash very hard all that time, their brains may grow bigger, and their jaws grow smaller, and their ribs come back, and their tails wither off, and they will turn into waterbabies again, and, perhaps, after that into land-babies; and after that, perhaps, into grown men.

You know they won't? Very well then, be it so; it is their concern, and not ours. We did not make them, and we are not responsible for them.

Meanwhile, do you learn your lessons, and thank God that you have plenty of cold water to wash in; and wash in it too, like a true English man. And then, if my story is not true, something better is; and if I am quite right, you will be, as long as you stick to hard work and cold water.

But remember always, as I told you at first, that this is all a fairy tale, and only fun and pretence; and, therefore, you are not to believe a word of it, even if it is true.

THE RUSSIAN POLITICAL PRESS.

FROM the establishment of the first printing-press in Russia under Ivan IV. in 1564, down to very nearly the present day, printing has been under the immediate control of the Government or Tsar as head of the Church and State. For two centuries it produced nothing but imperial decrees and ecclesiastical brochures. The first sheet which came out in the form of a newspaper was the Moscow Gazette, during the reign of Peter the Great, in 1703. It was printed in the old Cyrillic character, and did not adopt the new alphabet until 1711. Like the St. Petersburgh Gazette, which began to appear in 1711, it was published only at irregular intervals. In 1728, however, the St. Petersburgh Gazette came out regularly twice a week. But this was by no means a newspaper according to our interpretation of the term. It contented itself with the reproduction of ukases headed by all the ponderous and imposing titles of the Tsar-to question or omit any of which was felony-and of long lists of the appointments and promotions of civil and military dignitaries.

In the reign of the Empress Elizabeth, in 1745, a monthly literary review appeared, and about the same time, a literary and scientific journal was started at Moscow, under the auspices of the University in that city. Other new journals were started from time to time; but, although supported by the writings of some of the most celebrated Russian authors—such as Karamzin, Krilof, Derjavine, and the most eminent Professors of the Universities—they had, for the most part, but a sickly time of it.

Things remained much in this state till the irresponsibility of autocracy reached its culminating point in the reign of the Emperor Nicholas. Nevertheless, a revolution was going on beneath the surface, silently and imperceptibly, but surely.

The tyranny and abuses of the Government had completely sapped that respect for the Administration which had so long been held as a sacred article of Russian faith. The superstitious reverence of ages had by degrees given place to sarcasm, mockery, and a thorough distrust of the system, its measures, and its men. The late Tsar knew this, and thought that increased severity and unyielding rigour were the proper remedies for such a state of affairs. Nevertheless, thought was busy and opinions were fermenting in many individual minds. Despite the obstacles that were thrown in the way of foreign travel, men penetrated into Western Europe from time to time, and returned, bringing with them the thoughts and ideas naturally suggested by contact with a more advanced civilization. Despite the care which was taken to fill the minds of the people with visions of foreign conquest and territorial aggrandisement, doubts sprang up here and there as to whether military glory were really the be-all and end-all of national greatness. These doubts received strong confirmation from the events of the Crimean War.

With the death of the Emperor Nicholas a new era dawned upon Russia. The multiplied restrictions of the last reign were removed with a liberal hand. Under the reign of Nicholas the price of a foreign passport had been 500 roubles, or 751., a sum which amounted to a prohibition. Alexander II. reduced this to five roubles, or fifteen shillings; and in the very first year more than 50,000 persons availed themselves of the opportunity for foreign travel. The Emperor Nicholas had been very chary in allowing new journals to appear during his reign; but when his successor began his reign, the censorship was relaxed, and Russia was inundated with a flood of newspapers and periodicals. In fact, as the editor of a Russian journal once said to the writer of these lines, "There are more journals in Russia than men capable of conducting them." Be that as it may, the Press now forms a real power in Russia.

The chief strength of the Russian Press does not lie in newspapers, as we understand the term. The number of the daily journals is not very great, but there is a superabundance of periodicals, weekly, fortnightly, and monthly, more nearly resembling what we call Reviews. The Russian journals are also obliged to be very circumspect in their phraseology whenever they desire to call in question any acts of the Government, to criticize any individual minister, or even to canvass the foreign political affairs of the nation. But all this they contrive to do without rendering themselves amenable to censure or punishment. Whenever they wish to urge any reform, they find a parallel case in the history of England or France, or some other country enjoying, in comparison with themselves, the blessings of freedom. Whenever they wish to animadvert upon the evils of despotic authority and imperialism, Austria is generally selected as the object of attack, The reader finds no difficulty in substituting the one double-headed eagle for the other, and thus the lesson which the journalist meant to convey does not fail to produce the intended effect. So skilful have the Russian writers become in this particular kind of double entendre, that the censors are completely baffled and outwitted. When some member of the Administration, or other public functionary, is to be held up to public censure, some little story is produced, apparently a fiction, but in which everything is true except the names of the personages. Thus the writer's arrow reaches its mark, while the censor is defied with impunity. The affairs of foreign nations are freely and fully discussed. The progress of Italy was hailed long before the Government acknowledged the new kingdom as an accomplished fact. Austria meets with but little favour, and many a kind word and

encouragement is bestowed upon Hungary. Thanks to the discussions upon England, the Russian is thoroughly acquainted with the advantages of her free institutions and constitutional govern-A large space is devoted to literary reviews, and critiques on music and the stage, as well as to sketches of the country, and national manners and customs; while most of the journals are furnished with a feuilleton in the shape of a romance, either original, or translated from some celebrated foreign author. France was formerly the source from whence these last were derived; but of late England has superseded her, and in this form many of the works of our best novelists have been circulated in Russia. Much space is also devoted to controversy, which is conducted with great acrimony. This is not confined to hostile parties or rival journals only, but often takes the form of a literary duel between individuals, who abuse each other roundly, and are not squeamish in the choice of their phraseology.

It has been already stated that, at the accession of the present Emperor, the rigours of the censorship were mitigated. Afterwards, however, much of its former power was re-established. Courtiers, ministers, and functionaries had become exasperated at the systematic manner in which their peccadilloes were exposed by the journalists, whose extreme license, they persuaded the Emperor, would end in revolution. The new regulations of the censorship placed the Minister of the Interior at the head of it, with directions to see that (1) those articles which might be of a special or technical character, and freed from the operation of the general censorship, should be submitted to the authorities of those departments under whose cognisance the subjects which they might happen to treat naturally came; (2) those articles which fell under the general censorship should be submitted to the Minister of Public Instruction; (3) those having reference to ecclesiastical topics should be submitted to the head official of the Synod; (4) those having reference to the em-

peror and the members of the imperial family should be submitted to the Chamberlain of the Imperial Household. All the committees of censorship in the large towns, and the various censors elsewhere, were placed under the control of the Minister of Public Instruction, who was directed to consult the other administrative departments in whatever he might consider doubtful cases. All the publications of the various governmental institutions-naval, military, topographical, &c.—were exempted from the general censorship; but the heads of those departments were directed to choose certain persons as censors, who, in doubtful cases only, may consult the Minister of Public Instruction. Count Putiatin, the then Minister of Public Instruction, who does not appear to have benefited much by his long sojourn in England, endeavoured to carry the reaction still farther, but, fortunately, received no encouragement. The Government have, however, another hold upon the old-established journals, for they are farmed, i.e. rented direct from the Government, for certain fixed periods. The reason for this is that the offices, printing-presses, in fact, the whole "plant," is the property of Government-all these journals having originally been started under imperial auspices, although subsequently handed over to private management.

The two leading daily papers are the Moscow Gazette and the Petersburgh Gazette, which enjoy severally a larger circulation than any other daily journal in the empire, and count upwards of 9,000 subscribers each. The Petersburgh Gazette enjoys pre-eminent privileges, almost amounting to a monopoly, in the insertion of political intelligence and matter relating to State affairs. With the new year it has passed into other hands; and the new editor has just returned from an extended foreign tour, having concluded engagements with able correspondents in the principal European cities, as well as at New York and even Pekin. The paper is also greatly enlarged in size, and now takes up a decided position in politics, strenuously advocating a constitutional Government. Its old rival, the Moscow Gazette, however, has also changed hands-having passed into those of the proprietors of the Russian Messenger (a paper to be spoken of presently), who are devoting all their energies to making it the leading Russian journal. It has hitherto been the Moscow University paper, opening its columns impartially to the mutual attacks of opposed social and political parties, without itself commenting on The rent paid to Government for each of these journals amounts to about 10,000%. per annum, while the revenue they derive from advertisements amounts to about three-fourths of that

The next journal in importance is the Northern Bee, which was formerly distinguished as a strict conservative organ, and edited by the virulent anti-Anglican Bulgarin, but is now the most cleverly conducted radical newspaper in the empire. It has a circulation of upwards of 5,000.

The *Invalide* was once a semi-official organ, but under its present management it adopts no particular political opinions, although much of its space is devoted to wordy war, and is filled with the grossest personalities. Fortunately for this journal, the Government, in its wisdom, compels the officers of its legions to subscribe to certain scientific military and naval journals, and amongst the journals thus enforced upon the military is the *Invalide*. It boasts in consequence a much larger circulation (viz. 2,000) than it would otherwise enjoy.

The Northern Post is the organ of the Minister of the Interior. Yet, though it was founded with the intention of being a Government paper, it but seldom indulges in political articles of an official character. It is very carefully conducted, and has several sub-editors, who are responsible to the chief. Official intelligence appears in it a day or so earlier than in any other paper. Its circulation is 4,000. The Journal de St. Petersbourg, published in French for the convenience of foreigners, naturalized subjects, and, it may be, Russian polite

society in general, is the organ of the Foreign Office. It is chiefly remarkable for its unswerving hostility to England. But the bitterness of the editor is far outdone by his London correspondent, who occupies himself in gratifying the very essence of national antipathy to us. On the whole, however, this journal is conducted with great ability, although, in many respects, it is far from being impartial, even in its treatment of national subjects. Its circulation is limited to the metropolis, and does not penetrate into the interior, although its great foreign connexion brings it up to 8,000.

There is a daily sheet published in St. Petersburgh called the *Police News*. It is devoted to events in the city—accidents and crimes, official and general advertisements; chronicling, moreover, fashionable arrivals and departures—which form an important portion of the police intelligence, inasmuch as every one, before leaving the city for a foreign country, is obliged to advertise his ap-

proaching departure.

The only provincial paper worth mentioning is the Odessa Messenger, which is very popular amongst the Russian nobility and gentry removed from the circle of the metropolitan papers. It is neither absolutist nor democrat, and, while carefully steering a middle course, wins the sympathy of its subscribers by the accuracy of its information and the soundness of its criticism. The other provincial journals may be passed over. It is sufficient to inform the reader that the more humble dwellers in provincial towns do print and read, and that, failing better materials, they console themselves with the scandal—official and private—of the district, public notices, criminal cases, and legal proceedings generally. This state of things is chiefly owing to the censorship, which crushes enterprise, and forbids ambition from entering the field of local literary distinction.

Paper and labour are very much dearer in Russia than with us; yet the cost of annual subscription to the daily journals of Moscow and St. Petersburgh does not exceed 2l. 10s. of our money, or less than 2d. a day. The daily sheet, however, is only half the size-of our own. All the journals are supported by annual subscriptions. The experiment of newsboys to sell the journals in the streets was tried some time ago, but failed.

The principal periodicals in Russia, not newspapers (and not purely scientific or professional), are the Russian Messenger, the Contemporary, the National Notes, Our Time, and the Day. These periodicals are the mouthpieces of various classes, respectively representing Absolutists and Radicals, Constitutionalists and Anti-Constitutionalists, Conservatives and Abolitionists. This is truly a conflicting variety of parties, but the fact is, that in Russia society is not yet formed: there is nothing but a chaos, in which many distinctions are drawn, though convictions are not yet matured. The great Russian nation, which the patriots delight in comparing to a waking giant, is stretching its powerful muscles and testing its strength, on the eve of a great combat.

The Russian Messenger is by far the best of these periodicals; of some it is, after the fashion of planets, the parent; for more than one secession has at different times taken place from its ranks, and resulted in the appearance of a new luminary in the literary heaven. The politics of this journal are liberal, with a tinge of English conservatism; and it possesses in its chief editor, Mr. Katkof, one of the most accomplished scholars and journalists in the country. It has, for a long time, devoted its energies to setting England and English institutions in a true light before the Russian world. This claims the respect of the majority of the reading classes, and The Messenger enjoys an excellent reputation, while its circulation is upwards of 9,000. The adherents to this periodical base their ideas on English principles, so far as they can be made applicable to Russian life, and are therefore termed by their opponents "Westerns." They advocate a development in their commerce amounting to free-trade, trial by jury, and an extension of constitutional rights to all classes, from the peasant to the noble. When the present Emperor entered upon his magnificent project of the emancipation of the serfs, a certain amount of freedom was permitted to the newspapers in discussing the question, such as was never granted in other affairs of the nation; and The Messenger did very great service to the cause by its able articles on the subject. The Messenger used to appear in two forms: as a monthly magazine, containing literary, philosophical, and social matter; and as a weekly journal, in the shape of our Athenœum, containing political and other leading articles, general news, criticisms on literature, science, and art, and letters from foreign correspondents in London, Paris, Turin, &c. The best way, perhaps, to convey to the reader an idea of the style of The Messenger, is to give one or two quotations from a leading article in that journal, which was called forth by repeated scoffs at its " Anglomanian tendencies : " —"Our journal has more than once had " accusations of Anglomanian tendencies " brought against it, which have been " expressed thus: 'The Russian Mes-" senger wishes to transform our landed " proprietors into lords. The Russian "Messenger extols everything English "without sense or discrimination; it " advocates reforms in our universities " on English principles; defends the privileges of the English aristocracy; "sees safety for Russia in "Parlia-" mentarianism " alone." We shall "commence with the last more defi-" nite and tangible charge. We most " positively assert that on no occasion " have we ever upheld 'Parliament-" arianism' as the sole panacea for all " public and social inconveniences, past, " present, and to come. The parlia-"mentary form of discussing legisla-"tive measures is only one of many " means for giving vent to public " opinion. It degenerates into an " empty, and sometimes dangerous, for-" mality, when other expedients for "expressing the views of the commu" nity at large are not sufficiently " developed, and particularly when such " views do not exist, owing to the in-" difference of society for all public " matters. The contradictory and partial "judgment of distinct individuals, as "well as the opinions or wishes of "the different classes of society-even " though not necessarily split into hostile " camps-may supply the material itself " for the formation of public opinion; " but this material must yet pass the " ordeal of a free and open discussion " of arguments, pro and con, before it "obtains the character of a public " opinion based on lucid and firm con-" viction. There can be no public " opinion without private conviction " preceding it. . . . It is imperative "upon us, to place the citizen so as "to give him the liberty of disclosing "his thoughts without being obliged "to utter sentiments which he does " not entertain. In England, more " than elsewhere, this requirement finds " satisfaction; and it is owing to this "that we are ever inclined to say a good "word in her favour, and on every " suitable opportunity to draw the at-"tention of our readers to her shores." With the commencement of the present year the weekly sheet of the Messenger has been discontinued, in consequence of its editors having undertaken the Moscow Gazette.

The Contemporary is, strictly speaking, rather a literary publication than a political mouthpiece. It is conducted with great ability, and is remarkable for the clever and biting satire with which it attacks its opponents, and especially the Messenger, of which it is the acknowledged adversary. It altogether dissents from the faith of the "doctrinaires" of that periodical, and has no kind words for Great Britain; but, on the contrary, invariably expresses the greatest distrust of what it terms "the selfish mercantile policy" of that country. The Contemporary takes little pains to conceal its opinions, in which it is thoroughly sincere and consistent. It scoffs at constitutional government, and looks with favour upon democratic imperialism based on universal suffrage. It unceasingly declaims against the aristocracy and the inequality of classes, and is the staunch upholder of communistic and socialistic theories. Many of its articles advocate these tendencies openly enough, despite the censorship-a fact which would seem to show that the Government fears the advocacy of such opinions less than the promulgation of constitutional aspirations. One thing is certain, that the censorship has always shown itself much more severe towards moderate liberal journals than towards the organs of the most advanced radicalism. The Contemporary has recently sustained a very severe loss in the secession from its ranks of M. Turgenef, one of its ablest contributors, and a writer of European fame, who has gone back to the Messenger. It has a circulation of 7,500.

Our Time is a staunch upholder of the Government, Centralization appears to be the watchword of its policy. It loses no opportunity of lauding French institutions and the policy of the Emperor Napoleon, and as constantly inveighs against England and the English tendencies of the liberal party in Russia. It is a bitter enemy of the Messenger, with which it is ever at war. It is also a great foe of the Panslavists, and unremittingly attacks the present state of Russian society, asserting that, while the Government keeps pace with the age, society has not advanced beyond the sixteenth century. Its tone is, however, on the whole, mild, and a large party attaches to it, numbering more

than 4,000 subscribers. The National Notes is one of the oldest

journals in Russia. It scarcely deserves to be ranked amongst political organs, but it is a much-respected literary periodical, and always contains matter greedily devoured by the intellectual and the learned. Young and old, of both sexes, alike find food and improvement for the mind in its clever and well-digested articles, which embrace every topic in literature, art, and moral and metaphysical science. It is constant to nothing except its hatred of the Contemporary, which originated in a secession from its own ranks in 1847. It has a circulation of 3,000.

The Day is by no means the least important of the Russian periodicals. It is the organ of the Panslavists, and counts about 3,000 subscribers. grand principle of this journal is the supremacy of Russia in a general union of the Slavonic races. The question what form this supremacy ought to assume causes a division in the ranks of the party, who may therefore be divided into the Monarchical and the Federative Panslavists. But they are, with this exception, unanimous in their predominant idea of a Slavonian civilization supreme in Eastern Europe, with Russia at its head, which shall swallow up Austria and Turkey. exhibit great animosity against the Poles, because they prejudice the sympathy of the Slavonic races towards Russia, by standing between the latter and the Western Slavonians, and because, like the inhabitants of Little Russia, they desire a total severance. They hate Prussia, because she seeks to Germanize Posen; and Austria is the object of their especial aversion. They consider the civilization of Western Europe to be in a state of decrepitude and decay, with the exception of England, to which, however, they are not very friendly, on account of the protection she extends to Turkey. Owing to their great enmity towards Western civilization, there has been a great rapprochement between the Panslavists and the Radical Socialists of the Continent. They will, however, always be distinguished from the latter, because one of the chief articles of their faith is the supremacy of the Eastern Church, which they consider the purest representative of Christianity in the world. desire the entire abolition of the nobility as a separate class, and wish to merge them in the people, among the lower classes of whom, they contend, pure nationality is alone to be found. They nationality is alone to be found. object to the modern style of education in Russia, by which French, German, and English influence is brought to bear upon society; and they are altogether

opposed to free trade, as they think it will operate as a check to native industry. As might be expected, they ostentatiously parade their adoption of the old national dress and their adherence to old national customs. They have, moreover, a committee which watches over the interests of orthodoxy and Panslavism by promoting the rebuilding of churches, and the education of the young in their own tenets, for which purpose large sums are subscribed. The Panslavists are just now somewhat on the decline, partly because several of their most eminent literary champions have recently died; but they still number amongst their supporters many of the most intellectual as well as many of the wealthiest men in the country.

Any sketch of the Russian Press would be incomplete without a notice of what is called the Foreign Russian Press. The centres of its activity are London, Berlin, and Leipsic. Its most famous organ is the Kolokol, or Bell, published in London, and of which M. Hertzen is the editor. This terrible journal is the dread of all the Russian functionaries. It is more feared by the ministers and courtiers at the present day than was ever the formidable "dubina" (cudgel) of Peter the Great. No peccadillo-and with Russian officials these are neither few nor far betweenescapes the iron tongue of the Kolokol. Freed from the operation of the censorship, it exposes all official shortcomings, corruption, and tyranny, with remorseless vigour; and it is well known that many a contemplated act of wickedness has been abandoned, through fear of the immortal infamy certain to be conferred in its pages. No police ever organized by Fouché or Orlof have been so thoroughly informed of what was going on around them as the staff of the Kolokol. Secret circulars, despatched in the most confidential manner by the heads of departments to some of their subordinates, for their private guidance and instruction, have obtained a publicity never contemplated by their authors, through the instrumentality of this journal. It is, of course, prohibited in Russia; but, nevertheless, finds its way to that country, and is universally distributed in the same mysterious manner in which its information is supplied in the first Spies and police-agents have been repeatedly sent to London from . Russia for the purpose of finding out, if possible, M. Hertzen's channels of intelligence; but he has always known of their coming, and consequently their mission has failed. The Emperor Alexander, for many years, used to read the Kolokol regularly, though he has of late ceased to do so. On one occasion, this journal exposed a scandalous job, in which a certain very high officer, in close attendance upon the Emperor, was seriously implicated. The "exalted personage" in question obtained a sight of the number, in which he was himself held up to public opprobrium, before his Imperial Master; but how to prevent that Imperial Master from seeing it? To suppress it altogether would never answer, for the Emperor would be certain to call for his favourite (?) newspaper. Suddenly, a bright thought occurred to him—the difficulty was solved. caused the number to be reprinted with the obnoxious article omitted, and in this state laid it before his sovereign. Fortune favoured his ingenuity so far, but played him a scurvy trick in the The Grand Duke Constantine was at that time in Italy, and a copy of the identical number of the ubiquitous Kolokol fell into his hands. He was much struck with the particular article in question, and, sealing it up in an envelope, at once despatched it to his The royal seal must be rebrother. spected: the envelope reached the Emperor's hands unopened, and the ingenious "exalted personage" was checkmated after all. M. Hertzen has always been the staunch friend of serf-emancipation and other salutary reforms, and, however much one may differ from some of his views, he must always meet with that sympathy and respect which every one thoroughly in earnest in a good cause is certain to obtain among liberal and enlightened men.

There is a reproduction of the principal articles in the Kolokol, published at Brussels, under the name of La Cloche. Berlin and Leipsic content themselves principally with the production of pamphlets, satirical poems, and other fugitive brochures. At the latter place is published the "Truthteller" of Prince Dolgoroukow at irregular intervals. This nobleman was formerly a great friend of the Emperor, but, for some reason or other, he chose to leave his country, and has ever since declined to return. He now amuses himself by disclosures of many things that took place during his intimacy at court, which in no way call for publication, and which are often not of the most delicate nature possible.

There is in St. Petersburgh itself a secret press, which all the efforts of the police have as yet been unable to discover. It is devoted to the propagation of revolutionary ideas, and especially takes advantage of any times of popular commotion, to print and distribute enormous quantities of pamphlets and proclamations. These brochures are of a highly inflammatory character, are most extensively circulated, and eagerly perused. Its principal organ is termed the Welikorus, which only appears at irregular intervals, when an extra demonstration is deemed desirable. advocates the most decided socialistic doctrines, and incessantly calls upon the Government for reforms. It is a very small thin sheet, and is circulated gratis in large quantities by means of the post.

One of these flying-sheets, which has been reproduced in the Kolokol, is addressed "to the enlightened classes." It asserts that the early promise of the new reign has all faded away, and that the same tyranny which characterised the reign of Nicholas is again in full vigour in that of his son. It asserts that the Government are making a systematic attempt to crush and destroy the enlightened classes, but at the same time declares that the Government are, by their own acts, preparing their own downfal, "the presentiment of which has rendered it mad." It calls upon "the enlightened classes" to decide between the country and the Government, and tells them that if they do not abandon the Government it will drag them with it in its fall. "We, who are your "brothers, we cannot be against you; but, "if you range yourselves on the side of "the Government, the people, whose ter-"rible uprising cannot long be delayed, " will be against you, and against us, who "have neither the right nor the desire to "abandon the people in the hour of the

"fateful struggle."

The reader will be surprised at the activity of the press of a country which dates its intellectual resurrection only from the accession of the present Emperor. But, while periodicals form the chief employment of Russian writers, the more enduring forms of literature are not neglected. In addition to original works, many standard English authors have been translated and have had a large sale, such as Macaulay's "History of England," Buckle's "History of Civilization," Sir John Herschel's "Astronomy," and John Stuart Mill's "Political Economy." English works of fiction are also in great demand. Nearly all the works of Dickens, Thackeray, Wilkie Collins, Anthony Trollope, Miss Evans, &c., are as familiar to Russians as they are to Englishmen; and, whenever a story is coming out in the serial form by any of these authors, its conclusion is most impatiently waited for. We have no copyright treaty with Russia. France has, to this extent, that French works are not allowed to be reproduced in that language in Russia; translations, however, without the author's permission, are allowed. The French author cannot, therefore, benefit much by this treaty pecuniarily; and the English author must content himself with the honour and glory to be derived from the spread of his thoughts and ideas throughout this vast empire. English newspapers, too, are very freely admitted into Russia, much more freely than they are into France; and, though occasionally some article, or passage in an article, is painted out by the brush of the censor. yet the journal thus "illustrated" generally finds its way to its destination.

OYSTERS:

A GOSSIP ABOUT THEIR NATURAL AND ECONOMIC HISTORY.

THE animals that inhabit the sea have hitherto fared very badly at the hands of naturalists. If we except the salmon, which has been much observed, because of its being a migratory animal of great individual value, little or no reliable information exists as to how fish live and grow. We have recently, it is true, after much investigation, and a controversy spread over two hundred years, determined the parr question. But who can tell whether or no the sprat be the young of the herring, or answer precisely the very old question, "What is an eel?" Simple people, no doubt, suppose that an eel is a fish, and that a sprat is a sprat; but many clever observers think a sprat to be a young herring, and we have been recently informed, by a wonderful naturalist, that eels, which used, by eccentric boys, to be thought the produce of horse hairs placed in water, are the product of a beetle.1 We have, likewise, had some very curious controversies as to the growth and changes of some of our crustaceans, such as crabs and lobsters.

Our subject, however, is the Oyster. It is curious, considering how familiar is the sight of this molluse, that so little is known concerning its natural history. It is not yet settled, for example, how it reproduces itself—whether it be a hermaphrodite, or if there be

males and females. Having devoted some little time to a consideration of the question, we incline, ourselves, to the latter hypothesis; but this is not the proper place for a discussion of that part of the question. Again, people have asserted that the oyster can reproduce its kind in twenty weeks, and that in ten months it is full grown! Both of these assertions are pure nonsense. At the age of four months an oyster is not much bigger than a pea, and the age at which reproduction begins has not been accurately ascertained, but is thought to be three years. Oysters are usually four years old before they are sent to the London market. At the age of five years the oyster is, we think, in its prime; and some of our most intelligent fishermen think their average duration of life to be ten years.

Another point on which naturalists differ is as to the quantity of spawn from each oyster. Some enumerate the young by thousands, others by millions. It is certain enough, that the number of young is prodigious—so great, in fact, as to prevent their all being contained in the parent shell at one time, and that the process of spawning is not, as is generally supposed, instantaneous, but occupies a long time. Indeed, a particular animal will remain sick for two or three weeks, and during that period will be constantly throwing out its spawn, or spat, as it is usually named. By many observers, however, the spat is looked upon as a more developed stage of the spawn; and the young animal is thought to be distinctly formed, shell and all, before it leaves the protecting folds of the parent's mantle. We have often examined oyster spawn brought direct from the bed by means of a powerful microscope, and find it to be a liquid of some little consistency, in which the young oysters,

h

d

¹ The sprat controversy is likely to prove as interesting as the parr dispute. The present writer has reason to believe the sprat to be a young herring. The fact of sprats being occasionally found with roe proves nothing. The same argument was used in the parr dispute; but, for all its having roe, the parr has been proved to be the young of the salmon. The latest work on the eel is a curiosity, and details, with great circumstantiality, how that fish is born of a beetle, and how the author has seen the birth take place with his own eyes. The author's name is David Cairneross, and his publisher is G. Shield, 30, Lower Sloane Street.

like the points of a hair, swim actively about, in great numbers, as many as a couple of thousand having been counted in a very small globule of spat. The spawn, as found floating on the water, is greenish in appearance, and each little splash may be likened to an oyster nebula, which resolves, when examined by a powerful glass, into a thousand distinct animals.

Immense quantities of this spawn of oysters is annually devoured by othermolluses, and by fish and crustaceans of various sizes; it is well, therefore, that it is so bountifully supplied. On occasions of visiting the beds we have seen the dredge covered with this spawn; and no pen could number the thousands of millions of oysters thus prevented from ripening into life. Economists ought to note this fact with respect to fish generally, for the destruction of spawn of all kinds, by means of the trawl and otherwise, is so enormous, as to exercise a very serious influence on our fish

supplies.

As is well known, there is a period every year during which the oyster is not fished; and the reason why our English oyster-beds have not been ruined or exhausted by over-fishing arises, among other causes, from this fact of there being a definite close-time assigned to the breeding of the mollusc. It would be well if other varieties of sea produce were equally well protected; for it is sickening to observe the countless quantities of unseasonable fish that are, from time to time, brought to Billingsgate and other markets, and The fact that greedily purchased. oysters are supplied only during certain months in the year, and that the public have a general corresponding notion that they are totally unfit for wholesome eating during May, June, July, and August (those four wretched months which have not the letter "r" in their names), has been greatly in their favour; so that, whilst the supplies of salmon, or other kinds of sea or river food, has been fluctuating or steadily declining, the supply of oysters, to the London market at least, has been comparatively steady

and abundant. But, in future, if English growers are shrewd enough to profit by example, the only limit that there need be to the supplies will be the limit of cultivation. It is interesting to know, indeed, that for many years past oysters have been cultivated in this country with great assiduity—not, however, from the beginning or the spawn, as in France. Our English oyster-growers commence by collecting the brood wherever they can find it, whereas the French, as will by-and-by be shown, grow their own spat.

Oysters begin to sicken about the end of April, so that it is well that their grand rest commences in May. The shedding of the spawn continues during the whole of the hot months—not but that during that period there may be found supplies of healthy oysters, but that, as a general rule, it is better that there should be a total cessation of the trade in this season, because, were the beds disturbed by a search for the healthy oysters, the spawn would be

disturbed and destroyed.

The grand secret of growing oysters, as has been demonstrated by the success of the artificial beds in France, is to afford the young animal a fixed home, or holding-on place. This is the foundation of oyster-culture, into which the French people have entered with great enthusiasm, guided by Professor Coste and the engineers acting under his instructions. The fisheries of France in general, and particularly the oyster fisheries of that country, had become exhausted, chiefly from over-fishing, as is likely enough soon to be the fate of our own general fisheries, if remedial measures be not speedily adopted. The accidental re-discovery, however, of the ancient art of pisciculture by two fishermen of the Vosges, soon led to a magical change in the fish supplies of our continental neighbours. River fish were at once,

¹ Fish Culture, by Francis Francis, is the latest—indeed, the only complete—English work on the subject; but there are a great many French books on it, such as Multiplication Artificielle des Poissons, par J. P. J. Koltz.

on the promulgation of the discovery, extensively operated upon, and the supplies of trout, perch, and other denizens of the fresh-water streams at once augmented through the system of artificial spawning. The domains of the sea were then entered, and some of the more accessible kinds of salt-water fish were also largely cultivated. Lobsters and other crustaceans have now been taken in hand; and, as for oysters, they are grown in millions, extensive portions of the French shores being taken up with "parcs" devoted to their culture.

The secret of there being only a holding-on place required for the spat to ensure an immensely increased supply having been penetrated by the French people-and, no doubt, they are in some degree indebted to our oyster-beds on the Colne and at Whitstable for their idea-the rest was all easy enough. Strong pillars of wood were driven into the mud and sand; arms were added; the whole was interlaced with branches of trees; and various boughs besides were hung over the beds on ropes and chains, whilst others were sunk in the water and kept down by a weight. A few boat-loads of oysters being laid down, the spat had no distance to travel in search of a home, but found a restingplace almost at the moment of being exuded; and, as the fairy legends say, "it grew and it grew," till, in the process of time, it became a marketable commodity.

0

f

l,

y

n

al

10

al

e,

sh

at

To show the value of oyster-culture, it may be stated that, through overfishing, and ignorance of the natural history of this molluse, the fishery for oysters in the Bay of St. Brieuc, in Brittany, which at one time was very profitable, employing 200 boats and 1,400 men, became so much reduced, that 20 boats were found to be amply sufficient for the trade, twelve of the oyster banks having been thoroughly exhausted. But, under the guidance of M. Coste, who has projected, and is now carrying out, a chain of oyster beds round the French coast, the beds of St. Brieuc have been repeopled, or rather a series of new banks have been formed which have already become richly productive-a census of one bed giving the astonishing number of 17,000,000 of good-sized natives of St. Brieuc, besides a large quantity greatly smaller. On the borders of the Mediterranean, as well as in the Bay of Biscay, extensive beds have likewise been formed. M. Coste has himself given, in a paper recently communicated to the French Academy, some interesting particulars regarding his artificial oyster beds on the western coast of France. At the Island of Rhé, in the Bay of Biscay, great preparations have been made during the last four years to institute oyster-culture. With this project in view, the inhabitants of the island have been engaged in cleansing their muddy coast of the sediment which prevented the place being eligible for the nurture of the best kinds. As the work advanced, seed or brood was wafted to the spot from various oyster localities; but, in order to be certain of an oyster population, it was necessary to have the beds in a state of reproduction as speedily as possible. This was accomplished in the usual way in good time; and the beds, which amount to 1,500 in number, and cover 630,000 square metres of surface, now produce a very large annual return, their present crop being valued at from six to eight millions of francs.

We glean from these proceedings of the French pisciculturists the most valuable lessons for the improvement and conduct of our English oyster parks. If, as is pretty certain, each matured oyster yields about two millions of young per annum, and if the greater proportion of these can be saved by being afforded a permanent resting place, it is clear that, by laying down a few thousand breeders, we may, in the course of a year or two, have a large and reproductive farm. With reference to the question of growth, Coste tells us that stakes, which had been fixed for a period of thirty months in the lake of Fusaro, were quite loaded with oysters when they came to be removed. were found to embrace a growth of three years. Those of the first year's spawning were ready for the market; the second year's brood were a good deal smaller; whilst the remainder were not larger than a lentil. To attain miraculous crops similar to those achieved in the Bay of St. Brieuc, or at the Isle of Rhé, little more is required than to lay down the spawn in a nice rocky bay, or in a place paved for the purpose, and having as little mud about it as possible. We should desire a place that had a good stream of water flowing into it, so that the flock might procure food of a varied and nutritious kind. A couple of hundred stakes driven into the soft places of the shore, between high and low water-mark, and these well supplied with branches, held together by galvanized iron wire (common rope would soon become rotten) would, in conjunction with the rocky ground, afford capital holding-on places, so that any quantity of spawn might, in time, be developed into fine "natives," or "whiskered pandores." There are hundreds of places on the English and Irish coasts where such farms could be advantageously laid. Indeed, in Ireland, the system of laying down oyster broods already prevails to a large extent, and licences are freely given to those likely to carry on their operations in a spirited manner. The far-famed Scottish oysters obtained at Edinburgh, and once so cheap, are becoming scarce and dear, and the scalps or beds are being so 'rapidly overfished that, in a short time, if the devastation be not at once stopped, the Pandore and Newhaven oysters will soon be but names. Some of the greediest of the dredgermen, we are told, actually capture the brood and, barrelling it up, send it away to Holland and other places, to supply the artificial beds now being constructed off that coast. English buyers also come and pick up all they can procure for the Manchester and other markets. Thus, there is an inducement, in the shape of a good price, to the Newhaven men to spoliate the beds —another illustration of "killing the goose for the golden egg." The growth of the railway system has also extended the Newhaven men's market. the railway period very few boats went out at the same time to dredge; then

oysters were very plentiful—so plentiful. in fact, that three men in a boat could, with ease, procure 3,000 oysters in a couple of hours; but now, so great is the change in the productiveness of the scalps, that three men consider it an excellent day's work to procure about the fifth part of that quantity. The Newhaven oyster beds, we believe, belong to the city of Edinburgh, and were given in charge to the free fishermen of that village, on certain conditions, which are at present systematically disregarded. The proprietor of the most popular Edinburgh tavern experiences the greatest difficulty in obtaining oysters; and we take this opportunity of informing the Lord Provost of that city that, in the course of a year or two, "Auld Reekie" will, most probably, unless the authoriies bestir themselves in the matter, have to obtain her oysters from Colchester or Whitstable. This, surely, is a state of things dreadful for Scotchmen to contemplate. In former and more energetic times, the municipal authorities of the modern Athens used to venture on a voyage of exploration to view their scalps, and afterwards hold a feast of shells, as they do yet at some oyster towns on the annual opening of the fishery.

A large oyster farm requires a great deal of careful attention, and several people are necessary to keep it in order. If the farm be planted in a bay, where the water is very shallow, there is great danger of the stock suffering from frost; and again, if the brood be laid down in very deep water, the oysters do not fatten or grow rapidly enough for profit. In dredging, the whole of the oysters, as they are hauled on board, should be carefully examined and picked; all below a certain size ought to be returned to the water till their beards have grown large In winter, if the beds be in shallow water, the tender brood must be placed in a pit for protection from the frost; which of course takes up a great deal of time. Dead oysters ought to be carefully removed from the beds. The proprietors of private "layings" are generally careful on this point, and put

themselves to great trouble every spring to lift or overhaul all their oysters in order to remove the dead or diseased. Mussels must be carefully rooted out from the beds; otherwise they would in a short time render them valueless. The layings, for example, of Mr. David Plunkett, in Kilerry Bay, for which he had a licence from the Irish Board of Fisheries, were overrun by mussels, and so rendered almost valueless.

Χ-

1e

to

n

at

re

d.

ar

st

ve

1e

ri-

er,

1-

is

en

re

ri-

n-

W

st

er

he

at

al

er.

re

at

t;

in

en

n

ey

ly

r-

he

ge

in

be

he

at

be

he

0-

ut

The weeding and tending of an oyster bed requires, therefore, much labour, and involves either a partnership of several people-which is usual enough, as at Whitstable—or at least the employment of several dredgermen and labourers. But, for all that, an oyster farm may be made a most lucrative concern. guide to the working of a large oyster farm—say a concern of 70,000l. a-year or thereabout—we have the data of the Whitstable Free Dredgers' Company. The free oyster dredgers of that town form a kind of rude joint-stock company, and have among them a fleet of eighty oyster smacks for fishing and dredging, and fourteen carrying boats or hoys to take the produce to Billingsgate. dredge for the market for a few hours on three days of the week, according to what may be the demand from their salesmen at Billingsgate; and the other three days are devoted to the arranging, cleaning, and cultivation of the beds. banks fished by the Whitstable men are in East Swale Bay; they are the private property of the company, and are carefully divided into compartments, according to the age and quality of the oysters.

As regards the oyster cultivation of the river Colne, some interesting rearing statistics have been recently made public at Colchester by Councillor Hawkins. That gentleman tells us that oyster brood increases fourfold in three years. The quantity of oysters in a London bushel is as follows: first year, spat, number not ascertainable; second year, brood, 6,400; third year, ware, 2,400; fourth year, oysters, 1,600; therefore, four wash of brood (i.e. four pecks), purchased at, say, 5s. per wash, increases by growth and corresponding value to 42s. per

bushel, or a sum of eight guineas. The Whitstable dredgers, it is said, drew 60,000l. for their oysters in 1860, viz. 10,000l. for "commons," and 50,000l. for "natives;" but out of this sum they had of course to pay for "brood." The gross amount received by the Colne Fishery Company for oysters sold during the last ten years, ending at July, 1862, appears by the treasurer's account to have been 83,000l.; the average annual produce of the Colne Fishery Company having been 4,374 bushels for that pe-However, the quantity obtained from the river Colne by the company bears but a small proportion to the yield from private layings, which are in general only a few acres in extent. private layings," however, we are told, " cannot fairly be made the measure of " productiveness for a large fishery; as "they may be compared to a garden in " a high state of cultivation, while the "fishery generally is better represented " by a large tract of land but partially " reclaimed from a state of nature." The difference in cost of working the big fishery and a little one seems to be great. One of the owners of a private laying states that, when the expense of dredging or lifting the oysters exceeded 4s. per bushel, he gave up working, while in the Colne fishery dredgermen are never paid less than 12s., and sometimes as high as 40s. a bushel.

As showing the productiveness of some of the French oyster-beds, it may be stated that 350,000 oysters were obtained in the space of an hour from the Plessix bed, which is half a mile from the port of Auray; and, within a month or two after the opening of those beds, upwards of twenty millions were brought into port, giving employment to 1,200 fishermen. In a recent piscicultural report which we have consulted we find the following figures: "The total cost " of forming an oyster bank was 221 " francs; and, if the 300 fascines laid "down upon it be multiplied by 20,000, "the number of oysters each fascine "contains, 6,000,000 will be obtained, " which, if sold at 20 francs a thousand, " will produce 120,000 francs. If, how" ever, the number of oysters were to be " reckoned at only 10,000, the sum of " 60,000 francs would be received; which, " for an expenditure of only 221 francs, "would yield a larger profit than any " other branch of industry." The annual income derived from the artificial beds at the Lake of Fusaro amounts to thirteen hundred pounds; and the green oyster beds of Marennes furnish annually 5,000,000 of oysters. The price varies from one to six francs per hundred, but the average price may be reckoned at half-a-crown, and the annual revenue is upwards of 83,000l. Dr. Kemmerer, of St. Martin's, says that his artificial beds afford the immense profit of a thousand to one! May these facts take root, and induce a still larger oyster culture in this country than that which is now being carried on !

The demand for native and other oysters by the Londoners alone is something wonderful, and constitutes of itself a large branch of commerce-as the numerous gaily-lit shell-fish shops of the Strand and Haymarket will testify. These emporiums for the sale of oysters and stout are mostly fed through Billingsgate, which is the chief piscatorial bourse of the great metropolis. not easy to arrive at correct statistics of what London requires in the way of oysters; but, if we set the number down as being nearly eight hundred millions, we shall not be very far wrong. To provide these, the dredgermen, or fisher people at Colchester, and other places on the Essex and Kent coasts, prowl about the sea-shore, and pick up all the little oysters they can find—these ranging from the size of a threepenny-piece to a shilling-and persons having private "layings" purchase them to be nursed and fattened for the table. At other places the spawn itself is collected, by picking it from the pieces of stone, or the old oyster-shells to which it may have adhered, and it is nourished in pits, as at Burnham, for the purpose of being sold to the Whitstable people, who carefully lay their brood in their grounds. A good idea of the oyster traffic may be obtained from the fact that, in some years, the Whitstable men paid a sum of 30,000*l*. for brood, in order to keep up the stock of their far-famed oysters. Mr. Hawkins says that he knows a man who is proprietor of only three acres of oyster layings, and yet from that confined area he annually sells from 1,500 to 2,000 wash, *i.e.* pecks, of the best native oysters.

The London oyster season begins about the middle of August. Citizens are never allowed to forget it, as the pleasant little beggars, with their happy "chaff" of "please to mind the grotto," keep the event green in their memory. Vessels make their appearance every day at Billingsgate during the season, with large supplies of all the different kinds required for the metropolitan consumption. These-and we regret to say it, for there is nothing finer than a genuine oyster—are sophisticated in the cellars of the buyers, by being stuffed with oatmeal till the flavour is all but lost in the fat. The flavour of oysters -like the flavour of all other animals —depends on their feeding. The fine gout of the Preston Pans oysters-"the whiskered pandore"—is said to be derived from the fact of their feeding on the refuse liquor which flows from the salt pans of that neighbourhood. We have eaten of fine oysters taken from a bank that was visited by a rather questionable stream of water; they were very large, fat, and of exquisite flavour. The harbour of Kinsale used to be remarkable for the size and flavour of its oysters. The beds occupied the whole harbour, and the oysters there were at one time very plentiful, and far exceeded the Cork oysters in fame (and they have long been famous); but they were so over-fished as to be long since used up, much to the loss of the Irish people, who are particularly fond of oysters, and delight in their "Pooldoodies" and "Red-banks" as much as the English and Scotch do, in their "Natives" and "Pandores." Then there are the exquisite green oysters of Marennes, and the Ostend oysters. The latter are taken as brood from England, and then grown, for the Parisian and other continental

markets, at Ostend. The green oyster is not, as is often supposed, fed on matter that is coppery. At Marennes they are laid out in claires, in order to acquire this colour, and are not kept, as other oysters are, constantly submerged in water by the full tide (which is walled out), but are only allowed to be covered at springtides. The brood is collected and deposited in these beds when it is about six or eight months old, and it must remain three years at least before it acquires the green hue of perfection. The colouring property of these beds has been ascribed to an insect, to a disease which the animal contracts, and also to the nature of the mud of the M. Coste has analysed this mud, and believes, from its containing a slight excess in sulphate of iron and chloride of sodium, that it is the cause of particular beds growing a green

oyster. But Oysters have a social as well as natural and economic history. name of the courageous individual who ate the first oyster has not been recorded, but there is a legend concerning him to the following effect: Once upon a time —it must be a prodigiously long time ago, however-a man of melancholy mood, who was walking by the shores of a picturesque estuary, listening to the sad sea-waves, espied a very old and ugly oyster, all coated over with parasites and seaweeds. It was so unprepossessing that he kicked it with his foot, and the animal, astonished at such rudeness on its own domain, gaped wide with indignation. Seeing the beautiful cream-coloured layers that shone within the shelly covering, and thinking the interior of the shell itself to be beautiful, he lifted up the aged "native" for further examination, inserting his finger and thumb between the shells. The irate mollusc, thinking no doubt that this was meant as a further insult, snapt his pearly door close upon the finger of the intruder, causing him some little After releasing his wounded . pain. digit, the inquisitive gentleman very naturally put it in his mouth. lightful!" exclaimed he, opening wide

his eyes. "What is this?" and again he sucked his thumb. Then the truth flashed upon him. He had accidentally achieved the most important discovery ever made up to that date! Taking up a stone, he forced open the doors of the oyster, and gingerly tried a piece of the mollusc itself. Delicious was the result; and so, there and then, that solitary anonymous man inaugurated the oyster banquet.

Ever since the apocryphal period of this legend, men have gone on eating oysters. Princes, poets, pontiffs, orators, statesmen, and wits have gluttonized over the oyster-board. Oysters were at one time, it is true, in danger of being forgotten. From the fourth century to about the fifteenth they were not much in use; but from that date to the present time the demand has never slackened. Going back to the times which we now regard as classic, we are told that we owe the original idea of pisciculture to a certain Sergius Orata, who invented an oyster-pond in which to breed oysters, not for his own table, but for profit. He erected artificial rocks and surrounded them with wooden stakes, much as M. Coste carries on his operations in the present day; indeed, Coste's plans are founded, in a great measure, on those of the ancient Italians. The scene of the first process of oysterculture was on the shores of the Bay of Naples, in Lake Lucrinus, now known as Lake Fusaro; and the process of artificial breeding is still carried on pretty extensively at that place. We have all read of the feasts and fishdinners of the classic Italians. These were on a scale far surpassing our modern banquets. Lucullus had seawater brought to his villa in canals from the coast of Campania, in which he bred fishes in such abundance for the use of his guests that not less than twenty-five thousand pounds worth were sold at his death. Vitellius ate oysters all day long, and some people insinuate that he could eat as many as a thousand at a sitting-happiness too great for belief! Callisthenes, the philosopher of Olynthus, was also a passionate oystereater, and so was Caligula, the Roman tyrant. The wise Seneca dallied over his few hundreds every week, and the great Cicero nourished his eloquence with the dainty. The Latin poets sang the praises of the oyster, and the fast men of Ancient Rome enjoyed the poetry during their carouse, just as modern fellows, not at all classic, enjoy a song over their oysters in the parlour of a London or provincial tavern.

In all countries there are records of the necessary fondness of great men for oysters. Cervantes was an oyster-lover, and he satirized with his pen the oysterdealers of Spain. Louis XI., careful lest scholarship should become deficient in France, feasted the learned doctors of the Sorbonne, once a year, on oysters; and another Louis invested his cook with an order of nobility, as a reward for his oyster-cookery. Napoleon, also, was an oyster-lover: so was Rousseau. Invitations to a dish of oysters were common in the literary and artistic circles of Paris at the latter end of last century. The Encyclopedists were particularly fond of oysters. Helvetius, Diderot, the Abbé Raynal, Voltaire, and others were confirmed oyster-men. Before the Revolution, the violent politicians were in the habit of constantly frequenting the Parisian oyster-shops; and Danton, Robespierre, and others, were fond of the oyster in their days of innocence. The great Napoleon, on the eve of his battles, used to partake of the bivalve; and Cambaceres was famous for his shellfish banquets. Even at this day, the consumption of oysters in Paris is enormous, as may be judged from the statistics we have given of the produce of the artificial beds of France.

Among our British celebrities, Alexander Pope was an oyster-eater of taste: so was Thomson of the Seasons, who knew all good things. The learned Dr. Richard Bentley could never pass an oyster-shop without having a few; and there have been hundreds of subsequent Englishmen who, without coming up to

Bentley in other respects, have resembled him in this. The Scottish philosophers, too, of the last century-Hume, Dugald Stewart, Cullen, &c .- used frequently to indulge in the "whiskered pandores" of their day and generation. "Oyster ploys," as they were called, were frequently held in the quaint and dirty taverns of the old town of Edinburgh. These Edinburgh oyster-taverns of the olden time were usually situated underground, in the cellar-floor; and, in the course of the long winter evenings, the carriages of the quality folks would be found rattling up, and setting down fashionable ladies, to partake of oysters and porter, plenteously but rudely served. What oysters have been to the intellect of Edinburgh in later times, who needs to be told that has heard of Christopher North, and read the "Noctes Ambrosianæ?"

The Americans become still more social over their cysters than we do, and their extensive seaboard affords them a very large supply; although we regret to learn that, in consequence of over-fishing and of the carrying away of the fish at improper seasons, the cyster-banks of that great country are in danger of becoming exhausted. In City Island the whole population participates in the cyster-trade, and there is an oyster-bed in Long Island Sound which is 115

miles long.

The oyster can be cooked in all kinds of ways, but the pure animal is the best of all, and gulping him up in his own juice is the best way to eat The oyster, we maintain, may be eaten raw, day by day, every day of the 214 days that it is in season, and never do hurt. It never produces indigestion never does the flavour pall. The man who ends his day with an oyster in his mouth, rises with a clean tongue in the morning, and a clear head as well. Raw oysters, too, are said to be highly efficacious in certain cases of illness, and we know of instances in point; but we must leave this part of our subject to be developed by others.

SERMONS AND PREACHING.

BY THE REV. CANON ROBINSON, YORK.

To the average Englishman the sermon is a matter of course, a periodical process that somehow does him good, a time-honoured institution to which he is attached by habit, and the merits or defects of which he does not feel himself called upon to criticise. however, there are to whom preaching is a matter of much more interest and importance. They believe in it with all their hearts; they look upon it as the great end of church-going, and they indicate this by their very modes and forms of speech. They go to hear Mr. A; they sit under Mr. B; they attend the ministry of the Rev. Dr. C. To such persons, religious truths digested into a regular sermon, based on a selected text, and delivered from a pulpit by a minister in gown and bands, appear to have a mystic virtue and force, which the same truths spoken by the same minister during a pastoral visit, or read in the closet from a printed book, would not have. Hence, though sufficiently critical, they are not easily wearied of their favourite ordinance. As Horace's avaricious man must have money, by fair means or foul, so they must have sermons-good ones if possible, but, at all events, sermons.

After all, however, it may be doubted whether the fervent lovers of sermons in the abstract, are numerous. class is certainly said to be decreasing; and smart and sarcastic Reviewers insinuate that it consists chiefly of elderly ladies and substantial shopkeepers with puritanical leanings. There is a third party which, just now at all events, is more prominent, and has lately been exciting a good deal more attention. It consists of those who conceive themselves to have a mission to denounce ecclesiastical abuses and clerical shortcomings, and who accordingly have, for some time, been crying aloud, and

not sparing, in reference to sermons and preaching. How people came suddenly to wake up to the lamentable deficiencies of the pulpit, or who is entitled to the credit of having unearthed the pungent grievance, I cannot tell. nuisance, if it be one, is of old standing, though it has been left for modern critics to make so much of it. The substance of the gravamina alleged by these persons is very much as follows: Sermons are generally very dull; made up of dry . doctrinal commonplaces and trivial moral apophthegms; often diluted into vague generalities; seldom coming very directly home to men's business and bosoms; apt sometimes to stretch themselves beyond reasonable limits of time; for the most part heavily and awkwardly delivered, without any of the graces of oratory, and too often without any of the outward signs of earnestness.

Such and so serious are the counts of the indictment against the modern pulpit. And must we suffer judgment to go by default? It may, perhaps, be permitted to one of the Minor Prophets, without assuming the right to put himself forward as the representative of his order, simply to discuss the question, and offer for the consideration of the candid reader a few facts and suggestions concerning it.

In the first place, then, something must be conceded to our censors. Sermons are not, as a rule, remarkably original in thought, eloquent in style, or impressive in delivery. Very few of the clergy of the Church of England cultivate preaching as an art. Candidates for Orders, generally, have no specific training for the pulpit whatever. They do not profess to study rhetoric; they take no particular pains to learn the art of managing the voice; they make no account of that "action," or rather "delivery," which Demos-

thenes regarded as the first, second, and third condition of success in oratory. They simply enter the pulpit and place themselves in any attitude that may happen, and read off their written discourses as well as their natural gifts and aptitudes will allow. The consequence

is what might be expected.

So much being conceded, it may yet be well to point out the mistake of supposing that modern preachers have degenerated from the higher standard of an elder time. In the Augustan age of preaching-if ever there was such an age—the orators of the pulpit were, as they now are, the exception. Addison in the Spectator complains, as energetically as the latest correspondent of • the Times, of sound and well-composed discourses marred in the delivery; of the sleepy tones and motionless posture of learned and orthodox divines of great name and figure while proclaiming to their congregations the sublimest and most awful mysteries of life and death, Sanderson and Hooker owed nothing to the arts of the rhetorician; and the appearance of Barrow, when on one occasion he took his place in the pulpit of St. Lawrence-Jewry, was so uncouth that the greater part of the congregation scampered out of the church, and left him to preach his sermon to a forlorn hope of some half-dozen people. can readily imagine what must have been the character of the discourses of the great Parson Trulliber; and probably the homilies of Mr. Abraham Adams himself, learned and sententious as they doubtless were, would not be very agreeable to the taste of a modern congregation. Never was preaching more accounted of than in the sixteenth century. But even at that time great preachers were not numerous. The bulk of the clergy, indeed, were not licensed to preach at all; and it seems that many of them had not that very moderate amount of fitness for their work indicated by the ability to deliver decently a discourse composed for them; for we are told that the "Homilies" were often so read as to be utterly unintelligible to the hearers.

How is it, then, that there is such a tendency at present to disparage preaching? It arises, no doubt, from many causes. In the first place, the age is emphatically a critical one, and few things escape without questioning. Literary taste and mental culture are widely spread amongst the laity; and in these respects the clergy have no advantage over others of their own social rank. There are few congregations, in more populous places at least, in which there are not hearers at least as well read, as competent to judge of the merits and defects of a composition, as quick to detect false reasoning and shallow thoughts, as any average clergyman. The clergy, no doubt, are in advance of their brethren of former . days; but the laity of to-day are still more in advance of the laity of a corresponding period. Hence the interval between the teacher and the taught is narrower than it was, and the young church-going disciple in many cases soon discovers that he is not sitting at the feet of a Gamaliel when he is listening to the instructions of his parish minister.

But, again, if sermons are less esteemed, it is because they occupy, relatively, a much less important position than they once did. Formerly the sermon had no rivals as an instrument of public instruction; now it is in many respects supplanted by a great number. Formerly it was the medium through which information of almost all kinds was, directly or indirectly, conveyed to the people. It was sermon, lecture, newspaper, political harangue-all in one. Now its range is very much circumscribed, and it has been relegated to its original purpose of setting forth the truths of religion and the lessons of morality. In old times the Sunday sermon was the only bit of intellectual excitement or literary culture within the reach of the majority. No daily papers, with their vigorous and pointed leaders and their stores of varied news, came to impart tidings of the world without, and to tell men how it fared with their friends or foes in Church and

State. No serials poured out their many-coloured treasures at the feet of expectant readers, and no public lecturers, or heralds of the platform, popularized literature and science, or told of the apostolic devotion and marvellous triumphs of missionaries, or preached the gospel of sanitary and social reform in every village and town. The pulpit, therefore, had things all its own way, and took all these topics more or less under its patronage. The very speeches of the Bishops in the House of Lords were, according to Burnet, at one time sermons; for, instead of speaking directly to the question before the House, the right-reverend debaters used deliberately to give out a text and discourse upon it. Was a statesman to be attacked or defended, a policy to be commended to popular sympathy, a war to be justified or reprobated, the pulpit was the ordinary channel, and the preachers the accredited agents whereby the object was achieved.

An examination of some of the sermons of other days will bear out the view here given of their character and importance. Take, for instance, the discourses of good old Latimer. They are a repertory of all kinds of gossip and chitchat, where current intelligence, personal allusions, amusing anecdotes, and political innuendoes are mixed in a curious farrago with theological argument and earnest exhortation. Or turn to the pages of Jeremy Taylor. They fairly bristle with the horrent arms of classical scholarship. The imperial fancy of the preacher seems to have laid the whole world of ancient literature under tribute. most recondite mythological allusions, and the most varied historical incidents, are used to illustrate a position in theology, or to point a moral in practice, The fairest flowers of heathen poetry are pricked in to embellish the lessons of revelation, and Pan seems literally to have made a present to Moses of "his Pagan horn," filled to overflowing with the fruits of ancient dream and vision. How such sermons could ever have commended themselves to ordinary congregations must, no doubt, be a marvel to us

moderns. We cannot but suppose that they must have been "caviare to the general." But, indeed, it was not altogether so. As the preacher, from want of any other vent for his learning, turned the whole tide of it into his discourses, so the congregations of the seventeenth century, having no other intellectual stimulant, not only acquiesced in but exacted this copious irrigation of scholarship. This, strange to say, is equally true of rustic as of educated hearers. In those days a preacher had small chance of being popular if he confined himself to plain teaching in the vulgar tongue, and did not season his addresses with a certain proportion of what was above the vulgar comprehension. "A good sort of man but no Latiner," was the disparaging criticism of erudite farmers and peasants on any clergyman who tried to be simply useful, and to adapt his sermons to the supposed level of their bucolical understandings. This judgment was actually passed on the celebrated Pococke by some of his congregation before the Commonwealth Triers at Abingdon; and, if Owen had not interfered and obtained Cromwell's order to stop proceedings, the greatest scholar and linguist of the time would have been sequestered for insufficiency, on the representation of the sages of a Berkshire village.

It must have been the fact of sermons having the monopoly referred to which made the hearers of those days tolerant of what we should consider their extravagant length. Certainly, that impatience of anything over half-an-hour which, more or less, characterises the modern congregation, was a feeling with which our ancestors had no sympathy. It is difficult to say what they would have called a long sermon. Cranmer, on one occasion, cautioned Latimer "not to stand longer in the pulpit than an hour and a half." Hooker, again,in his debate with the Puritans, as to the length of the church-service, incidentally names "an hour" as the average time that may fairly be allotted to the Donne also, in one of his sermon. discourses, while deprecating the expressions of approval to which congregations in those days sometimes gave utterance, complains of them as swallowing up one quarter of the preacher's "hour." But, indeed, if some of the great sermons of the great preachers were delivered as they have come down to us, a single hour cannot have sufficed to see the end of them; and we are gravely assured that, when Barrow preached a spital-sermon before the Lord Mayor and Corporation of London, he occupied three hours and a half in its delivery, thus cruelly trying the patience and endangering the digestion of that worshipful

body. There is one evidence of the greater importance and authority of sermons in former times which deserves to be noticed. It is the prominent place they occupy in our standard national literature of the seventeenth century. Not only has a great deal of our Anglican theology taken the form of sermons, but sermons furnish some of the best specimens of the English prose of the period. Who needs to be reminded of the sententiousness of Hall, the English Seneca; of the redundant eloquence of Taylor, and the strong, full, nervous, practical style of South? Who has not heard that Dryden, a master of composition, attributed his proficiency in that grand art to a nightly and daily turning of the pages of Tillotson, and that the "Great Commoner" of a later age did not hesitate to avow that the study of Barrow's Sermons had made him an orator ?

From what has been said it is obvious that, at the very outset, the modern preacher finds himself, in many respects, at a considerable disadvantage in comparison with the preachers of other days. He has by no means so clear a stage on which to expatiate; he has lost his former monopoly of the public ear; and yet he has to submit to the ordeal of a far more general and searching criticism.

But other difficulties and embarrassments attend his position. If the length of sermons has been happily curtailed, their number has been painfully increased. An ordinary clergyman, in his normal condition of ministerial efficiency, is expected to preach at least two sermons weekly; and, if he wishes to be regarded as "making full proof of his ministry" he must, at all events, add to his programme one weekday service with its inevitable lecture. Now, it is probable that very few persons ever set themselves to ascertain what amount of thought and labour the composition of two or three sermons weekly involves. The occasional recurrence of such a responsibility would be found arduous enough; but, when the process has to be repeated week after week, and year after year, it is too much for the readiest and fullest of men, and must be too often done in a haphazard, superficial, and .

perfunctory fashion.

Besides, while nobody becomes a writer for the press, or, at least, continues very long to fill that position, without some aptitude for the work, the task of sermon-writing is necessarily imposed on many who, though perhaps otherwise efficient in their calling, have no power at all of original composition. It is, indeed, one of the singular and seemingly irremediable anomalies of the Church of England, that there is no classification of her ministers, and no division of labour in her communion. Every clergyman is expected to put his hand to every sort of work. There is a most serene disregard of individual aptitudes-a studied practical denial of the apostolic assertion that "there are diversities of gifts." Hence, if you take your seat in one of our churches, you are as likely to be advised in the conduct of your life, or instructed in the mysteries of religion, by a new-fledged curate, in the verdure of his fifth lustrum, as by a venerable priest, grey with the experience of time, and stored with the lucubrations of twenty years. The necessary consequence of this is, a constantly recurring series of examples illustrative of the "foolishness of preaching." And, assuredly, the preachers are least of all to blame for this. Anyhow, they must provide their "tale of bricks," —their indispensable batch of sermons.

If they are conscious of their own want of experience, imperfection of knowledge, or deficiency in literary power, they have one, and only one, resource: they can preach other people's sermons. And it must be admitted that this resource is sufficiently understood and appreciated. The only question is, how far it can be justified by other pleas than that tyrannical one of necessity.

The appropriation of other men's thoughts without acknowledgment looks very like a breach of the Eighth Commandment;—we are almost tempted to exclaim, with Dogberry, "It is flat burglary as ever was committed." yet, after all, there is much to be said for it. Indeed, if preachers will eschew all surreptitiousness in the matter, and do the thing openly and avowedly, it is perhaps, under existing circumstances, the very best thing that some of them can do. There is, at all events, ancient and time-honoured precedent for the practice. It was-if we may believe St. Jerome and other Fathers-an occasional usage of the Primitive Church. Addison has endorsed it with the stamp of his approbation. After mentioning that it was the custom of Sir Roger de Coverley's venerable chaplain to treat his congregation to a succession of sermons by great divines, he adds the following observation: "I could heartily " wish that more of our country clergy " would follow this example, and, instead " of wasting their spirits on laborious " compositions of their own, would en-"deavour after a handsome elocution, " and all those other talents that are "proper to enforce what has been " penned by greater masters. " would not only be more easy to them-"selves, but more edifying to the "people." It deserves to be considered whether—as Addison here suggests it would not be a positive gain to the sermon-hearing public if "readings from standard Divines" were occasionally delivered from our pulpits, and allowed to alternate with original discourses. The Church of England can boast of a long list of learned and eloquent writers in theology. Of these the laity, as a rule, know nothing except, perhaps, the names; nor is it likely that their works will ever be much read except by professional students. But these works are the common heritage of the nation; and, as they deal with great questions in a thoughtful and comprehensive spirit, and are fitted, whether in any case we accept the opinions they express or not, to teach us how to form our own, the diffusion of a more general acquaintance with them would be a wholesome medicine for some of the religious maladies of these times.

While vindicating the clergy from much of the blame that might seem to attach to them on account of the declining popularity and influence of sermons, and endeavouring to show that the fact, if it be one, arises in some degree from circumstances over which they have no control, it must still be conceded that they do not, as a body, give as much time and attention to preparation for the pulpit as they might do. The excuse is multiplicity of engagements — overwhelming pressure of other duties. But many of these engagements and duties are of secondary importance, and some are decidedly secular in character. In fact, addiction to the service of tables is a clerical failing of the present day. It is a seductive one, too, for there is a charm for many men in being busy and bustling, serving on committees, travelling on deputations, getting up meetings, canvassing for subscriptions, running to and fro on the earth, multum agendo nihil denique agentes.

But, after all, it would be interesting to know what suggestions those have to make who are loudest in their complaints about the decadence of preaching, what remedies they are prepared with for the grievance which they so pitifully bemoan.

They would not—we may fairly conclude—recommend amputation pure and simple. They are not prepared to echo, in regard to sermons, St. Paul's wish with reference to certain obnoxious preachers, "I would they were even cut off that trouble you!" But, if the sermon cannot be altogether got rid of, what can be done with it? It can, of course, be shortened. And, indeed, under the pressure exercised by the complainants,

this process is already going on in many quarters, so that there is some prospect of the standard length being ere long reduced from half an hour to a quarter, and the preacher may ultimately be so restricted in time that his discourse will necessarily appear in a disembowelled state, consisting merely of exordium and

peroration.

Again, it has been suggested that the nuisance complained of would be sufficiently abated if the whole congregation, or any of them, could, if they thought fit, leave the church before the preacher begins his discourse. would, no doubt, be a certain way of escape from the dreaded ordeal, and might also serve as a wholesome stimulus on the clergyman's powers of composition and delivery. But, setting aside the apparent discourtesy and irreverence of such a proceeding, there is nothing to hinder any one from having recourse to it whenever he pleases. If this be all that is necessary to relieve the sufferers, we simply say, Solvitur ambulando.

After all, however, though it may be granted that the state of the modern pulpit is not altogether satisfactory, we cannot admit that the evil is to be cured by treating with disparagement and contempt the ordinance of Preaching itself. By the power of the living voice man has always acted upon and won influence over man. By the living voice Christianity was first published to the world. Through all ages of the Church preaching has been regarded as an important function of the Christian priesthood, and a regular feature of public worship. At first, no doubt, its style was simple and unpretending enough. A few earnest and affectionate words of practical admonition, an unadorned exposition of some portion of Scripture just read, or a devout enforcement of the lesson it conveyed, made up the sermon of a primitive Bishop or Presbyter, an Ignatius, a Papias, or a Polycarp. But, when the Church was more fully developed, and learning had become the handmaid of religion, preaching assumed more of the character of an art. Grecian rhetoric was employed to set forth the truths of the Gospel, till Basil

and Gregory almost rivalled the crators of a more classic age, and John Chrysostom poured out his fervent periods, and scattered his lavish illustrations amidst murmurs of applause that echoed strangely through the solemn aisles of the consecrated temple. With the dark ages the lustre of the pulpit also became dim, till sermons grew few and far between, and, when preached, conveyed no better moral than the enforcement of a superstitious usage, and told no diviner tale than the lying legends of a spurious saint, or the ribald jests of a vagrant friar. But then came the great awakening of the Reformation, and with it-as has been noticed—a wide-spread and most potent revival of preaching, till the pulpit rose to something of the importance of a "Fourth Estate," and the voice . of "prophesying" shook throne and mitre to the ground.

Surely, then, in this nineteenth century also, there is some work left for the pulpit to do, some way open whereby preaching may retrieve itself, and be once more a great moral power in the

country.

It would be useless, no doubt, to hint at the expediency of materially reducing-with a view to quality-the quantity of sermons preached in our fifteen or twenty thousand churches. And yet, if the public insist upon quantity, they must not be fastidious about quality. The fact is, that people generally have, in some degree, lost sight of the original object of church-going. They do not seem to feel that the chief reason for assembling together, Sunday after Sunday, is to realize their Christian fellowship and to worship God in com-With very many the sermon is the great business of the day, the chief feature of the service. Hence they would scarcely consider that they had properly discharged their religious responsibilities unless they had listened to a couple of set discourses, though it is quite possible that they may neither have been awakened thereby to any deeper earnestness of life, nor have learnt anything that they did not know before.

Then, again, the sermon itself is

somehow embedded like a fossil in the stratification of the service, so that its delivery seems a matter of course, and it comes, too, after the congregation have been already occupied for an hour and a half in prayer, praise, and the hearing of Scripture. It is, therefore, from its very position at a serious disadvantage. But is this association of sermon and liturgy so inviolable that they cannot occasionally be separated? Why should not sermons be sometimes preached without the long preliminary service of worship, this being duly provided for at some other period of the day? There are, moreover, occasions when an active clergyman might very properly collect in his church a class of people to whom devotion is a thing so untried and unknown that for them the form of joining in any outward service of prayer would be an unreality. In such a case the sermon by itself might, from the lips of an earnest and eloquent man, go forth with a power like that which characterized the discourse of Paul in the synagogue of the Pisidian Antioch. Besides, the occasional prominence thus given to the sermon would lead preachers to spend more time in preparing their discourses, and would tend to a more thorough elaboration both of matter and manner.

And this suggests the remark that, if sermons do not produce the effect they should do, one cause, undoubtedly, is their vague, discursive, unsystematic character. Seldom, indeed, are our pulpits the scene of any methodical or consecutive course of religious instruction. A text suggests itself or is suggested by chance, or by some passing event, or by some turn of the preacher's studies. This is taken and preached upon as an isolated proposition, while the truth enforced and illustrated on one Sunday is not in any way deduced from or linked with the truth enforced and illustrated on another. The textual system, if I may call it so, has, in fact, in many ways done no small damage to theology. It has tended to establish a persuasion that Christian doctrines can be unanswerably proved by detached quotations from Scripture, and that an opponent in controversy can

be silenced and refuted by a brisk fire of texts discharged at him like a succession of shots from a ten-barrelled revolver. It has likewise fostered a style of preaching which—however practically edifying it may sometimes be—is not well suited to give the hearers very clear or connected views of Christianity as a grand religious system. We need not insist that sermons shall be absolute scientific lectures; but it would nevertheless be well if they were more generally made the vehicles for communicating to the people some systematic knowledge of the sublime science of theology.

The practice of expository preaching, again, if sometimes adopted, and really well done, would probably do much to retrieve the reputation and increase the usefulness of the pulpit. The people of this country are justly tenacious of their right to read and interpret the Bible for themselves. But it is by no means certain that they have generally a very intimate knowledge of the Bible, or a very intelligent appreciation of its contents. How many of the middle-class laity, for instance, can enter into the arguments, or understand the allusions and figures, in St. Paul's Epistles? What a work would be achieved if the clergy would set themselves thoroughly and lucidly to expound some of these sublime and difficult compositions to their flocks! What a sight it would be to see a congregation, instead of languidly settling themselves to be talked to or read to for half an hour, take their Bibles in hand and prepare to follow the argument as traced out by their instructor, and make a real intelligent study of the subject. One important collateral advantage, too, would follow from the adoption of expository preaching. It would compel the clergy to make themselves more than superficially acquainted with their Bibles. -If an exposition is to be anything better than a feeble paraphrase, or a weak and twaddling dilution of the original text, he who expounds must have prepared himself for his work by painful study, must have pondered long over his subject, and searched far and wide for the materials of a thorough exegesis.

What is called extemporaneous preaching is strongly advocated by many as best adapted to interest and amuse the hearers. And the notion is not unrea-Whatever of clearness, acsonable. curacy, and order is secured by the written discourse, there is a counterbalancing loss of warmth and reality. The manuscript is only a moderate conductor of enthusiasm. "What" (says Sydney Smith) "can be more ludicrous "than an orator delivering stale indig-"nation and fervour of a week old; "turning over whole pages of violent " passions written out in German text; "reading the tropes and apostrophes "into which he is hurried by the ardour "of his mind; and so affected at a pre-"concerted line and page, that he is "unable to proceed any further?" the same time we must say of extempore preaching, non cuivis homini contingitit is not every one who is master of this particular art; and the stammering tongue, the disjointed sentences, and the entangled thoughts of an unskilful pretender are at least as ludicrous as the stale emotion and ready-made rhetoric described by the witty Canon of St. Paul's. Still it must be allowed that the unwritten address is the proper and normal kind of preaching, and, indeed, of all oral instruction; and the clergy of the Church of England would be material gainers by more generally cultivating the art of extempore speaking, while it is certain that a large proportion of them might, with some little patience and perseverance, attain a very fair degree of efficiency in it.

It would be easy to multiply suggestions for increasing the power and the popularity of the pulpit. The recommendation of a more thorough and special training for the clerical calling has so often been made, and seems so unlikely, for some time, at least, to be carried out, that it is superfluous to make it again. The attempt to utilize, as far as possible, the preaching power which is actually to be found in the Church, by instituting an accredited order of preachers, would, perhaps, be

thought to involve interference with the vested interests of clergymen in their own parishes, and would certainly be met by the embarrassments and jealousies of opposite theological parties.

But, whatever can or cannot be done, it behoves the clergy, at all events, to set distinctly before their minds the fact that they are, in this matter of preaching, subject to a strict, vigilant, and often unsparing censorship. We can stand up in our pulpits and compel the passive acquiescence, if not the active attention, of all within hearing of us. We are free to state our views, and to support them by what arguments we please. We cannot be answered. But we can be judged; and, in this matter, it is not for our sakes, or for the sake of the Church, a small thing that we "be judged by any man's judgment."

Only this may be observed in conclusion. The results of sermons are probably small, and, could they be ascertained statistically, would be sufficiently disheartening. But the preacher is often more than his discourse. Men will listen to commonplaces, when he who utters them does so as if they were the true convictions of his heart. A very plain exhortation, if it is earnest and heartfelt, and backed by the testimony of a consistent life, will have its effect on the most critical and accomplished, as well as on the simplest and most unsophisticated hearer. preacher aims at higher things, if he wishes not only to edify but to teach, he must not grudge time, and labour, and thought. Above all, he must take a flight above the dull region of technicalities and forms. He must not be content with reiterating the stereotyped phraseology of the pulpit, but must seek to give utterance to the impressions made on his own soul by the living truths of Christianity. He need not affect mere novelties, or indulge in bold incursions across the frontiers of heresy, but he must know how to deal with God's great revelation, as a record of the immutable ways of Providence, as a philosophy and a law of life.